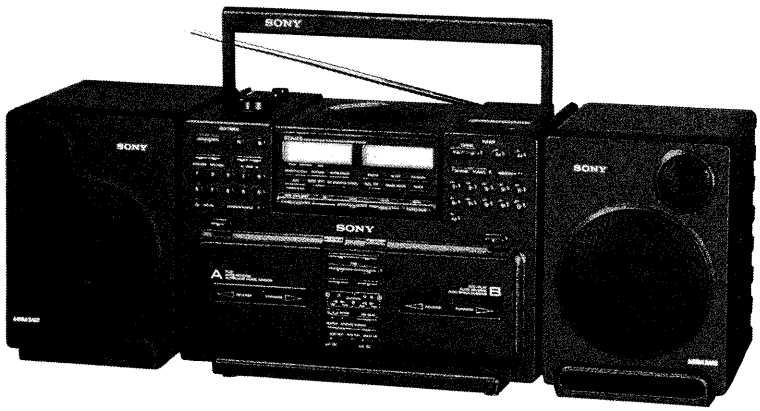
CFD-775

SERVICE MANUAL

US Model



MEGA BASS

Model Name Using Similar Mechanism	CD Section	NEW
	Tape Section	CFD-770
Optical Device Name	KSM-2101BAN	
Tape Transport Mechanism Type	DECK A: MF-770PB-65 DECK B: MF-770RP-65	

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
With 4-ohm loads, both channels driven from 150 – 10,000 Hz: rated 9 W per channel-minimum RMS power, with no more than 10% total harmonic distortion in AC operation.

Other Specifications

CD player section

System	Compact disc digital audio system
Laser diode properties	
	Material: GaAlAs
	Wavelength 780 nm
	Emission duration: Continuous
	Laser output: Less than 44.6μW*
	* This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block.
Spindle speed	200 r.p.m. to 500 r.p.m. (CLV)
Error correction	Sony Super Strategy Cross Interleave Read Solomon Code
Number of channels	2
Frequency response	20 – 20,000 Hz ±3 dB
Wow and flutter	Below measurable limit

Radio section

Frequency range	FM: 87.6 – 108 MHz
	AM: 530 – 1,710 kHz
Antennas	FM: Telescopic antenna
	AM: Built-in ferrite bar antenna

Tape recorder section and general

Recording system	4-track 2-channel stereo
Fast winding time	Approx. 140 sec. with Sony cassette C-60
Frequency response	• TYPE I (NORMAL) cassette: 60 – 13,000 Hz
	• TYPE II (CrO_2) cassette: 60 – 16,000 Hz
Speaker	Two-way speakers: Woofer: 10 cm dia, cone type, Tweeter: 5 cm
Inputs	Mixing microphone input jack (minijack)
	Sensitivity 2.5 mV
	For low impedance microphone
Outputs	Headphones jack (stereo minijack)
	For 16 – 68 ohms impedance headphones
	Two CD output jacks (phono jack)
	Load impedance 10 kilohms or higher
	Rated output 0.98 V rms at load impedance 47 kilohms

– Continued on next page –

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

使用時は添付資料も参照のこと
Refer to the additional documents.

CD RADIO CASSETTE-CORDER

SONY®

Power requirements	120 V AC, 60 Hz DC 12 V, 8 size D (R20) batteries for CD radio cassette-corder DC 6 V, 4 size AA (R6) batteries for clock/timer/memory
Power consumption	AC 40 W
Battery life	Batteries for radio cassette-corder

	Recording	Playback	CD playing
Sony SUM-1 (NS)	approx. 2 H	approx. 0.5 H	approx. 0.5 H
Sony Alkaline AM1 (N)	approx. 5.5 H	approx. 1.5 H	approx. 1 H

For clock/timer/memory: Approx. 1 year

Dimensions	686 × 250 × 234 mm (w/h/d) ($27^1/_8 \times 9^7/_8 \times 9^1/_4$ inches) incl. projecting parts and controls
Weight	Approx. 11 kg, incl. batteries (Approx. 24 lb 4 oz)
Supplied accessories	AC power cord (1) Remote commander (1)

Design and specifications subject to change without notice.

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
SERVICING NOTES

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

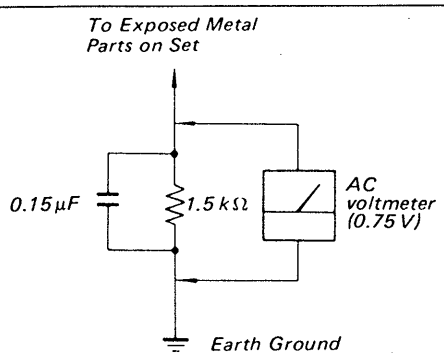


Fig. A. Using an AC voltmeter to check AC leakage.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

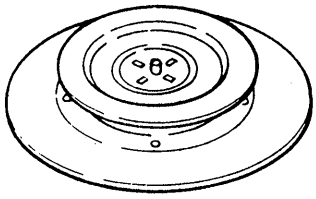
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 25 cm away from the objective lens.

CHUCK PLATE JIG ON REPAIRING

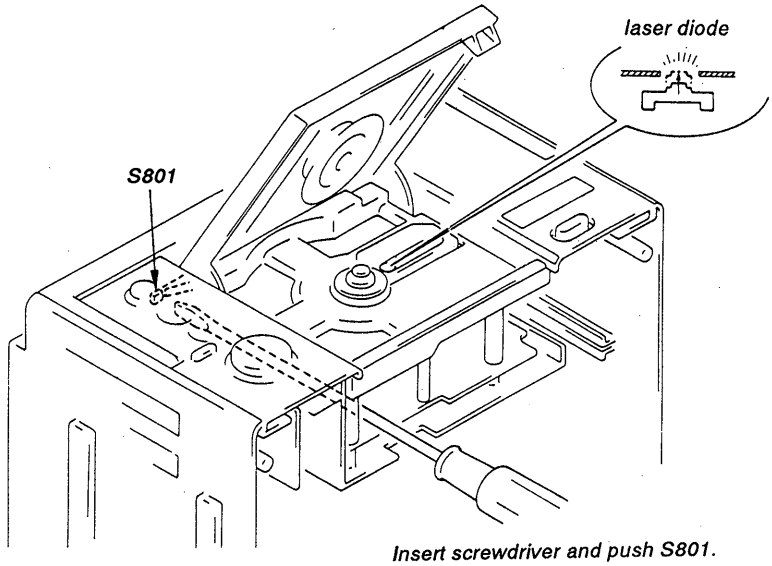
On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.

- Code number of Chuck Plate Jig: X-4918-255-1



LASER DIODE AND FOCUS SEARCH OPERATION CHECK

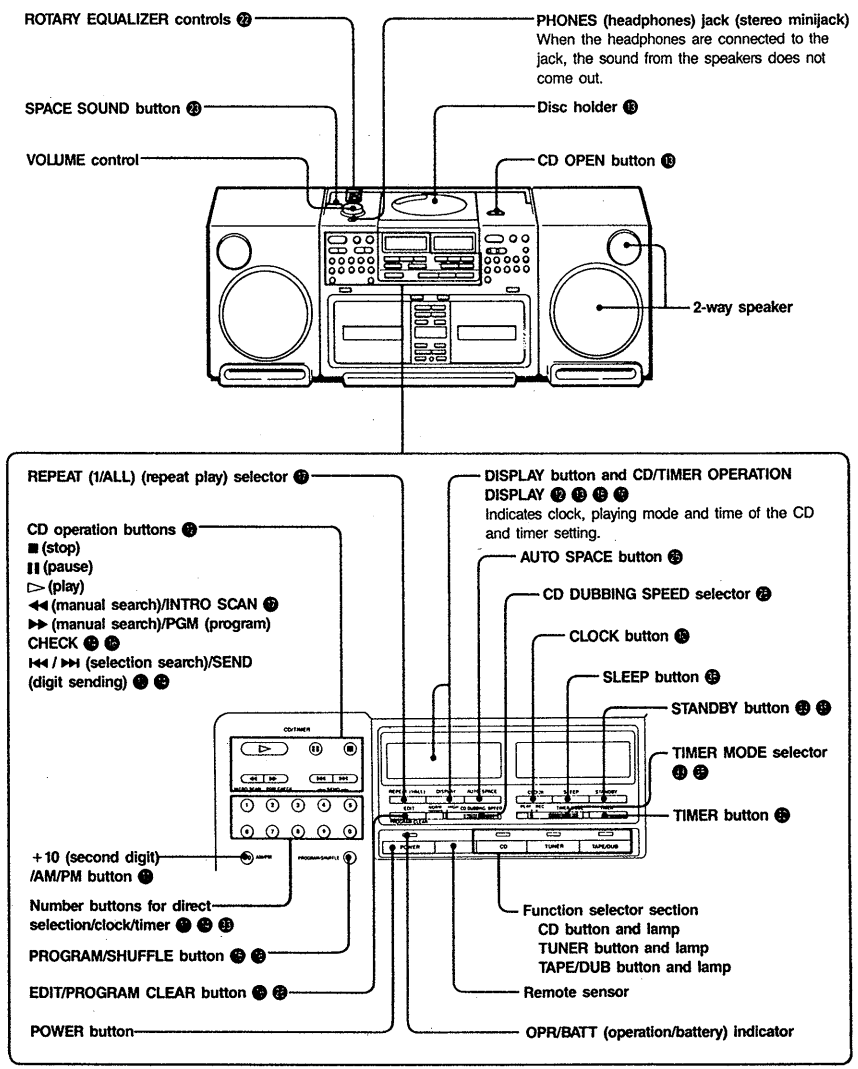
1. Make Function switch to CD position with no disc inserted.
2. Open the lid for CD.
3. Turn on S801 as following figure.
4. Press ▶ key.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
   Objective lens moves up and down once for the focus serarch.



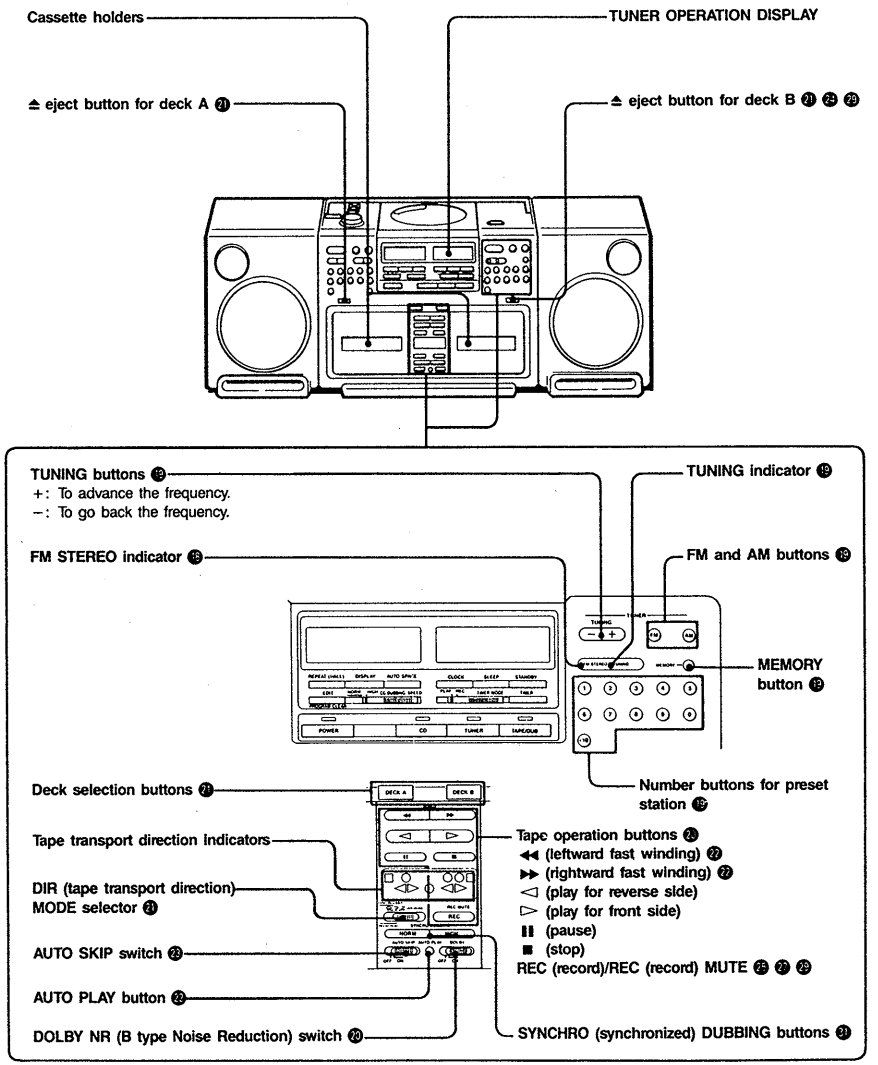
Insert screwdriver and push S801.

Parts Identification Refer to the pages indicated in ● for details.

CD Player, Clock, Timer and Sound Adjustment Section

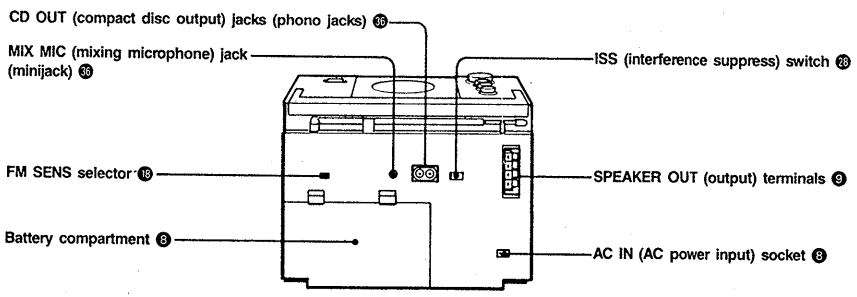

ROTARY EQUALIZER controls ㉗
PHONES (headphones) jack (stereo minijack)
When the headphones are connected to the jack, the sound from the speakers does not come out.
SPACE SOUND button ㉓
Disc holder ⑮
VOLUME control
CD OPEN button ⑬
2-way speaker
REPEAT (1/ALL) (repeat play) selector ⑰
DISPLAY button and CD/TIMER OPERATION
DISPLAY ⑫ ⑬ ⑮ ⑯
Indicates clock, playing mode and time of the CD and timer setting.
CD operation buttons ⑱
■ (stop)
❚❚ (pause)
▷ (play)
◀◀ (manual search)/INTRO SCAN ⑰
▶▶ (manual search)/PGM (program)
CHECK ⑮ ⑯
⏮ / ⏭ (selection search)/SEND
(digit sending) ⑭ ⑮
AUTO SPACE button ㉓
CD DUBBING SPEED selector ㉒
CLOCK button ⑫
SLEEP button ⑮
STANDBY button ㉑ ⑮
TIMER MODE selector ㉑ ㉕
TIMER button ㉕
+10 (second digit) /AM/PM button ⑭
Number buttons for direct selection/clock/timer ⑭ ㉕ ⑮
PROGRAM/SHUFFLE button ⑮ ㉔
EDIT/PROGRAM CLEAR button ⑭ ㉔
POWER button
Function selector section
CD button and lamp
TUNER button and lamp
TAPE/DUB button and lamp
Remote sensor
OPR/BATT (operation/battery) indicator

Radio and Cassette-corder Section


Cassette holders
TUNER OPERATION DISPLAY
⏏ eject button for deck A ㉑
⏏ eject button for deck B ㉑ ㉓ ㉘
TUNING buttons ⑲
+: To advance the frequency.
−: To go back the frequency.
TUNING indicator ⑲
FM STEREO indicator ⑱
FM and AM buttons ⑱
MEMORY button ⑲
Number buttons for preset station ⑲
Deck selection buttons ㉑
Tape transport direction indicators
DIR (tape transport direction) MODE selector ㉑
AUTO SKIP switch ㉘
AUTO PLAY button ㉘
DOLBY NR (B type Noise Reduction) switch ㉘
Tape operation buttons ㉘
◀◀ (leftward fast winding) ㉗
▶▶ (rightward fast winding) ㉗
◁ (play for reverse side)
▷ (play for front side)
❚❚ (pause)
■ (stop)
REC (record)/REC (record) MUTE ㉓ ㉗ ㉘
SYNCHRO (synchronized) DUBBING buttons ㉑

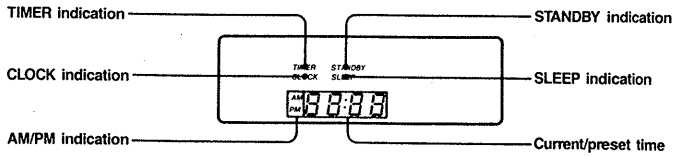
Location and Function of Controls

Rear Panel

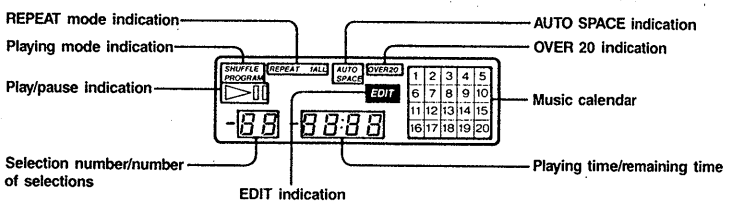

CD OUT (compact disc output) jacks (phono jacks) ⑯
MIX MIC (mixing microphone) jack (minijack) ⑰
ISS (interference suppress) switch ⑱
FM SENS selector ⑲
SPEAKER OUT (output) terminals ⑨
Battery compartment ⑧
AC IN (AC power input) socket ⑧

Display Section

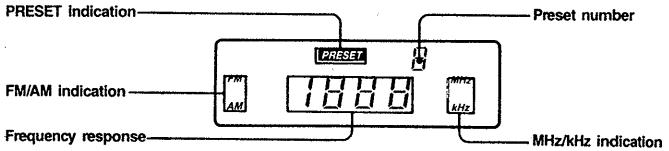
For clock and timer



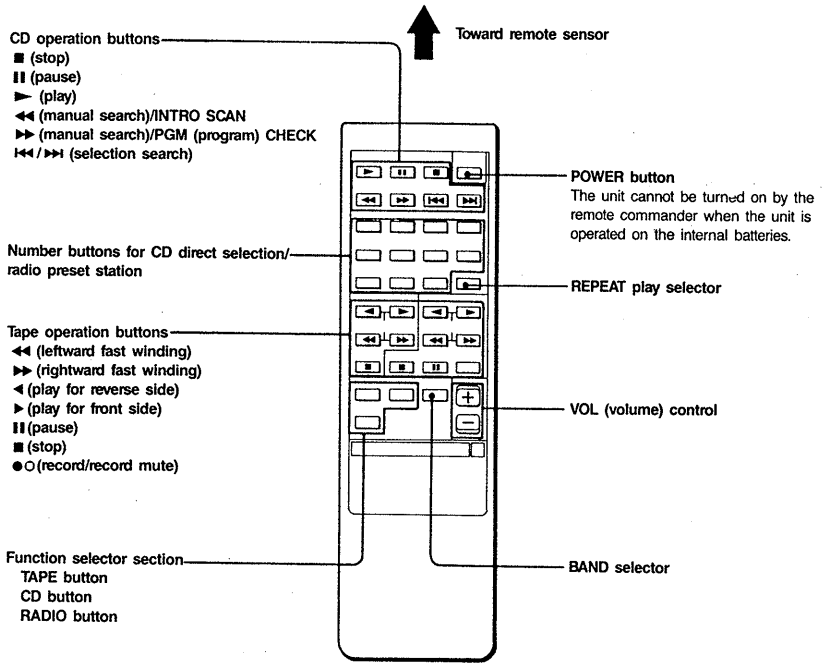
For CD playing



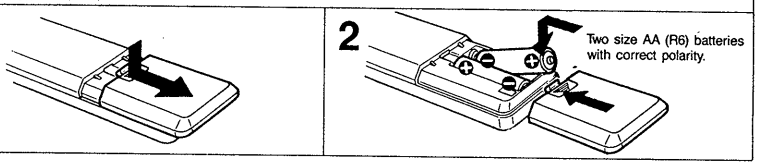
For radio reception



Remote Commander



Battery Installation

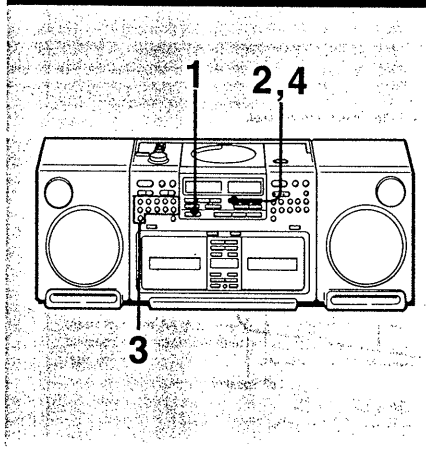


Notes on the remote commander

- Keep the commander away from extremely hot or humid places.
- To avoid malfunction, do not simultaneously depress two or more buttons.
- When the battety is exhausted, the commander will not operate the CFD-775. In this case, replace the batteries with new ones. In normal operation, battery life is up to half a year.

Setting the Clock

Size AA (R6) batteries for the clock/timer/memory should be inserted in the battery compartment.



1 Turn the power off.

POWER

2 Press for about 4 seconds until CLOCK appears in the display window.

CLOCK

3 Press the number buttons to enter the hour and then the minute. If the hour and/or minute has one digit, be sure to press 0 before the number.
Select AM or PM by +10/AM/PM.

Example: To set to 8:45 PM.

0 → 8 → 4 → 5 → +10 AM/PM

4 Press again.

CLOCK

The clock starts.

AM 12:00

CLOCK AM 12:00

CLOCK AM 0 2:00 → AM 0 8:1 0 → AM 0 8:4 0 → AM 0 8:4 5 → 0 8:4 5

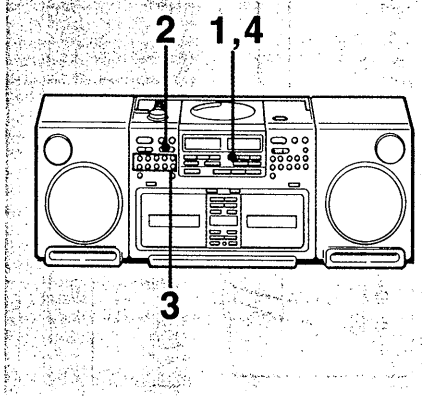
Blinking shows the position where the next number will be entered.

PM 8:45

All the digits stay lit.

To change One Digit

Example: To change AM 1:01 to AM 1:00.



1 Press for about 4 seconds until CLOCK appears in the display window.

CLOCK

2 Press the times until the last digit blinks.

SEND

Blinking moves to the left by pressing ⏮.

3 Press the number button.

4 Press again.

CLOCK

The clock starts.

CLOCK AM 0 1:0 1

CLOCK AM 0 1:0 1 → AM 0 1:0 1 → AM 0 1:0

CLOCK AM 0 1:00

AM 1:00

AM 12:00 = midnight
PM 12:00 = noon

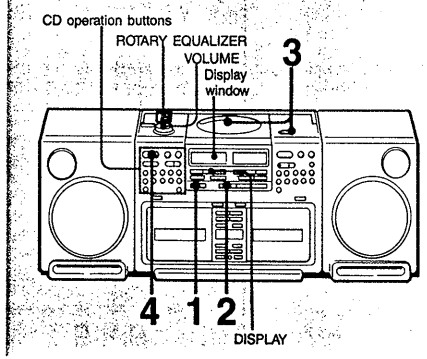
To set the clock exactly to the second
Use the radio or telephone time signal.
Set the time indication to a few minutes in anticipation of a setting time. Then, press the CLOCK button simultaneously with the radio or telephone time signal.

To check the current time
The display window shows the current time except when the CD is playing. To check the time when the function selector is set to CD, press the CLOCK button.

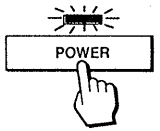
Playing Discs

You can play an 8 cm (3-inch) CD without using an adaptor for it.

Make sure the STANDBY indication does not appear in the display window.

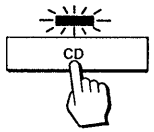


1 Press.

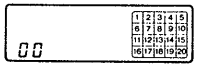


The OPR/BATT indicator lights up.

2 Press.

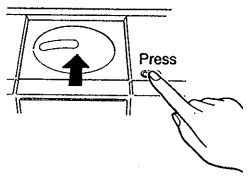


The CD lamp lights up.

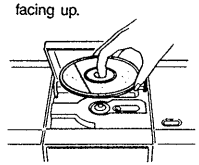


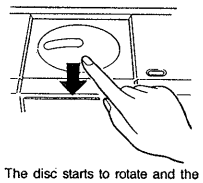
3

Keep the handle down.

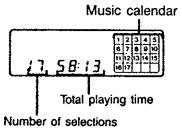


With the labeled surface facing up.



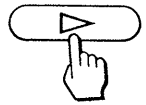


The disc starts to rotate and the indication appears as follows.

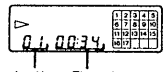


The indication will return to 00 after about 4 seconds.

4 Press.



Play starts from the beginning of the disc.



Note

Do not open the disc holder while playing the disc.

To adjust the volume and tone

Use the VOLUME and ROTARY EQUALIZER controls.

CD operation buttons

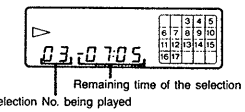
If you want to	Press
play	▷
stop play	■
pause for a moment	II
resume play after pause	II
remove a disc	■ ➡ Press the OPEN button.

After use, press POWER again.

To Display Remaining Time

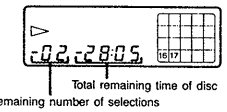
The selection being played

Press DISPLAY once.



The disc being played

Press DISPLAY twice.

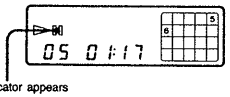


For normal display, press DISPLAY again.

During shuffle or repeat playing, the remaining time of the disc being played cannot be displayed.

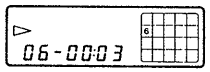
Information Display

While CD player appears



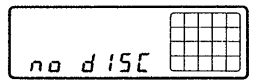
Between selections

The remaining time for the next selection is displayed.



Notes

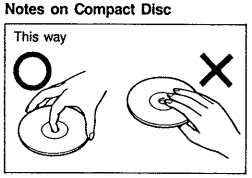
- If the disc is played near a TV or radio, noise may occur on the TV or radio.
- If there is no disc in the disc holder, the following indication appears in the display window.



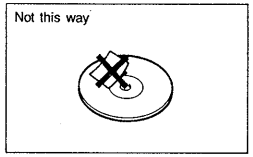
- If the no dISC indication appears when the disc holder is closed with a disc inside or when the CD button is pressed, press a button other than the CD button first and then press the CD button. Make sure the total selection number in the display window is correct, and then start over, using the steps above.
- Up to 20 selections are displayed in the music calendar.
- If the disc has more than 21 selections, OVER 20 appears in the display window.

- The remaining time of the selection from the 21st selection appears as "--:--". Elapsed playing time is displayed during playing.

Notes on Compact Disc



Handle the disc by its edge, and to keep the disc clean, do not touch the surface.



Do not stick paper or tape or write anything on the surface.

Before playing, clean the disc with the optional CD cleaner. Wipe the disc from the center out.

Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

After playing, store the disc in its case.

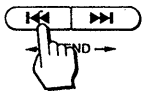
Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight where there can be a considerable rise in the temperature.

To Locate the Beginning of a Selection (AMS*)

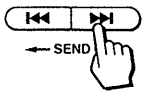
Be sure the SHUFFLE and PROGRAM EDIT indications are not displayed in the display window. Otherwise, press the PROGRAM/SHUFFLE button.

Press ⏮ or ⏭ during play or pause.

To locate a previous selection
Press ⏮ once to locate the beginning of the selection being played. Press continuously to locate a previous selection.



To locate a selection ahead
Press ⏭ once to locate the next selection after that being played.
Press continuously to locate a selection ahead.



In pause mode
The player pauses at the beginning of each selection.
To start playing, press ⏸.

During program play
The function of ⏮ or ⏭ plays selections in the memorized order.

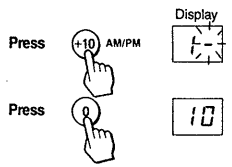
During shuffle play
The disc does not locate a previous selection but the beginning of the selection being played when the ⏮ button is pressed.

*AMS: Automatic Music Sensor

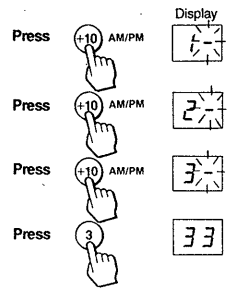
For Selecting a Selection Desired Directly

Press a selection number by using the number buttons.
If a selection number is more than 10, press +10 first then the number buttons.

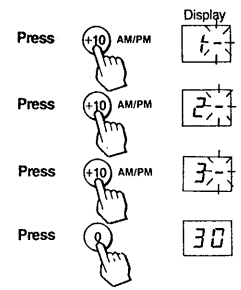
Example:
To select the 10th selection



To select the 33rd selection

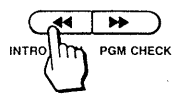


To select the 30th selection

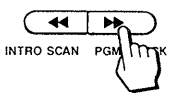


To Search for a Paricular Point in a Selection (Search)

Press ◀◀ or ▶▶ during play or pause.
To review disc playing



To advance disc playing



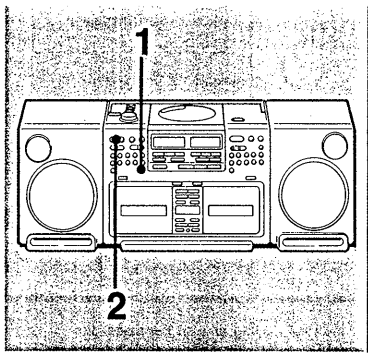
Release the button at the point desired, located by monitoring the high-speed sound.

If the pause mode, you can search rapidly. However, you cannot hear the sound. Observe the time counter.

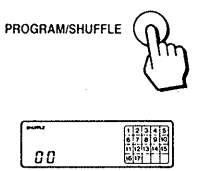
Various Disc Playing Modes

Each time you press the PROGRAM/SHUFFLE button, the playing mode changes in sequence as indicated in the display window: SHUFFLE ➡ PROGRAM EDIT ➡ normal play.

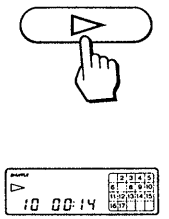
To Play Selections in Random Order—Shuffle Play



1 **Press until SHUFFLE indication appears.**



2 **Press.**



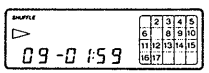
The selection number will disappear from the music calendar when the selection is finished.

To stop shuffle play
Press ■.

To release shuffle play
Press PROGRAM/SHUFFLE until the SHUFFLE or PROGRAM EDIT indication disappears from the display window.
Normal play begins from the selection being played.

To start shuffle play from normal play
Press PROGRAM/SHUFFLE during normal play.
Shuffle play begins from the selection being played.

To display the remaining time of the selection being played
Press DISPLAY once.



The remaining time of the selection being played

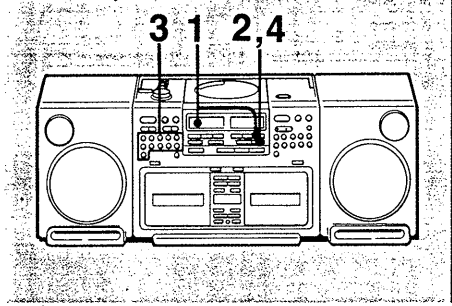
To return to the normal display, press DISPLAY again.
From the 21st selection, the remaining time will be displayed as "--:--".

Note
During shuffle play, the remaining time of the disc is not displayed.

Using the Built-in Timer

To Set the Timer-on Time

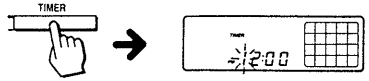
Only the starting time can be preset. The power turns itself off automatically after two hours.



1

Make sure the STANDBY indication dose not oppear in the display window. (If it appears, press the STANDBY switch.)

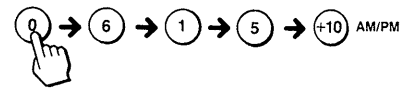
2 Press.

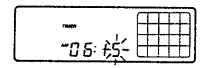


The TIMER indication appears in the display window.

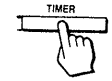
3 Press the number buttons to program the starting time.

Example: To set to 6:15 AM





4 Press.



The current time appears in the display window.

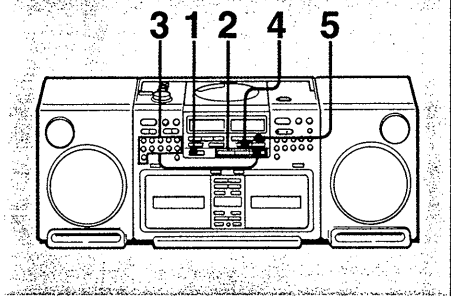
If the timer is preset by mistake
Repeat steps from the beginning. The previous preset goes off.

To check the preset time
When you press TIMER in the STANDBY mode, the preset time will appear.

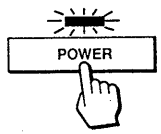
Note
Be sure to program AM and PM correctly.

To Listen to the Sound at the Time Desired (The back light in the display window does not light up.)

Check to see that the clock shows the current time. If it does not, see page 10.

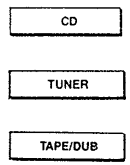


1 Press.



The OPR/BATT indicator lights up.

2 Select the sound source desired.

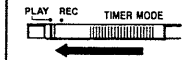


	Corresponding button	Preparation
To listen to a disc	CD	Insert a disc into the disc holder.
To listen to a radio	TUNER	Select the band and tune in the desired station.
To listen to a tape	TAPE/DUB	Insert a tape into deck A.

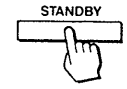
3

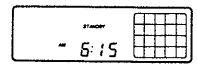
Set the timer. See above.

4 Set to PLAY.



5 Press.





The STANDBY indication appears in the display window.

At the preset time
The sound will come on automatically at the preset time, and will turn off automatically after two hours have elapsed.

To release the preset time
Press STANDBY. The STANDBY indication disappears from the display window.

To listen to the sound source desired at the same time on another day
It is not necessary to set the timer again since the preset time is memorized until you reset the timer. Repeat steps 2,4 and 5 in "To Listen to the Sound at the Time Desired". If the STANDBY indication does not appear in the display window, press the STANDBY button again.

To listen to a programmed disc at the time desired
Program the disc. (See page 16.)

To listen to a disc in the shuffle mode at the time desired
Be sure that the disc player in the stop mode and press PROGRAM/SHUFFLE until the SHUFFLE indication appears on the display window.

To repeat only one selection
Choose one selection by pressing ⏮ or ⏭ and press REPEAT (1/ALL) once. REPEAT 1 indication appears in the display window.

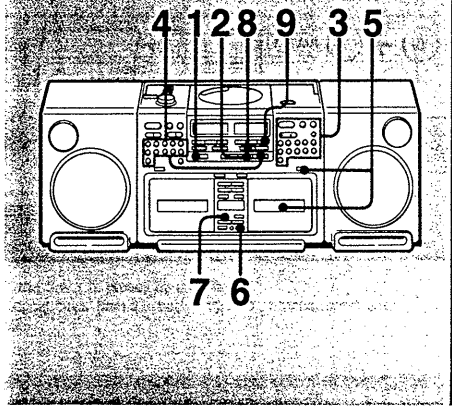
To repeat the entire disc
Press REPEAT (1/ALL) twice. REPEAT ALL indication appears in the display window.

AM 12:00 = midnight
PM 12:00 = noon

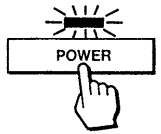
Using the Built-in Timer

To Record the Sound at the Time Desired (The back light in the display window does not light up.)

Check to see that the clock shows the current time. If it does not, see page 10.

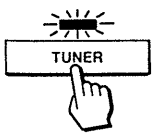


1 Press.



The OPR/BATT indicator lights up.

2 Press.



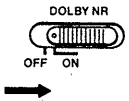
The TUNER lamp lights up.

3 Select the band desired and tune in the station. See page 18.

4 Set the timer for recording. See page 32.

5 Insert a cassette into deck B. Use TYPE I (normal) or TYPE II (CrO_2) tapes.

6 Set to ON when you record using the DOLBY B Noise Reduction system.

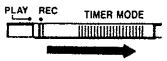


7 Set to the position desired.

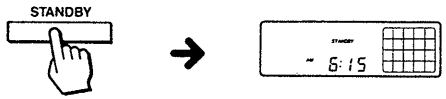
	DIR MODE selector
To record on both sides of a cassette	Set to ⇄ or ⇄ / SYNC REV/EDIT.
To record on one side of a cassette	Set to ⇄.

Both-sides-recording should be started from the front side.

8 Set to REC.



9 Press.

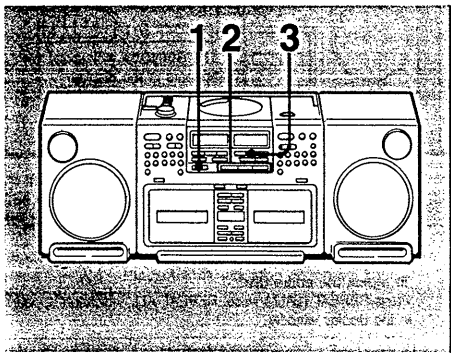


STANDBY indication appears in the display window.

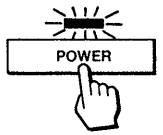
At the preset time
The recording will start automatically at the preset time and will turn off automatically after two hours. If a cassette of less than 120 minutes is used, the recording will finish when the tape reaches the end.

To release the preset time
Press STANDBY.

To Fall Asleep with the Sound Desired — Sleep function (The back light in the display window does not light up.)



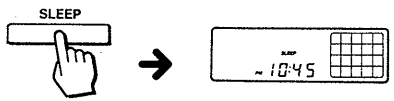
1 Press.



The OPR/BATT indicator lights up.

2 **Select the sound source desired.**
When using a disc or a tape as the sound source, have either the tape or the disc in the playing mode.
When listening to a radio, tune in the desired station.

3 Press to start the sleep function.



The sound source will turn itself off after 60 minutes.

To release the sleep function before 60 minutes have elapsed
Press SLEEP again or POWER to turn the power off.

You can fall asleep with the sound desired and you will be awakened by the same program at the preset time.

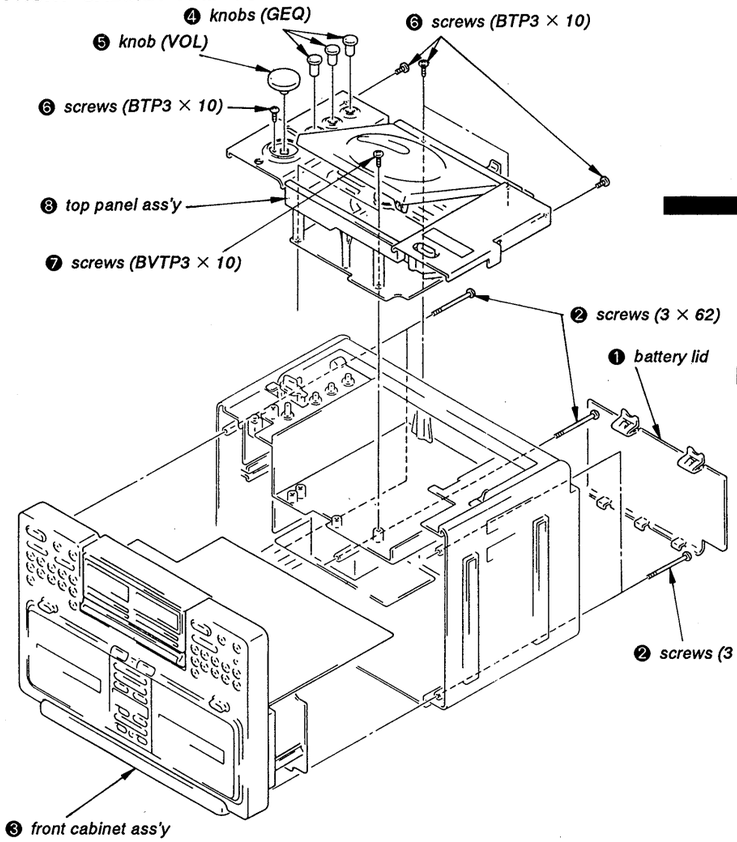
1 Follow the steps as described in "To Listen to the Sound at the Time Desired".

2 Press SLEEP. The SLEEP indication appears in the display window.

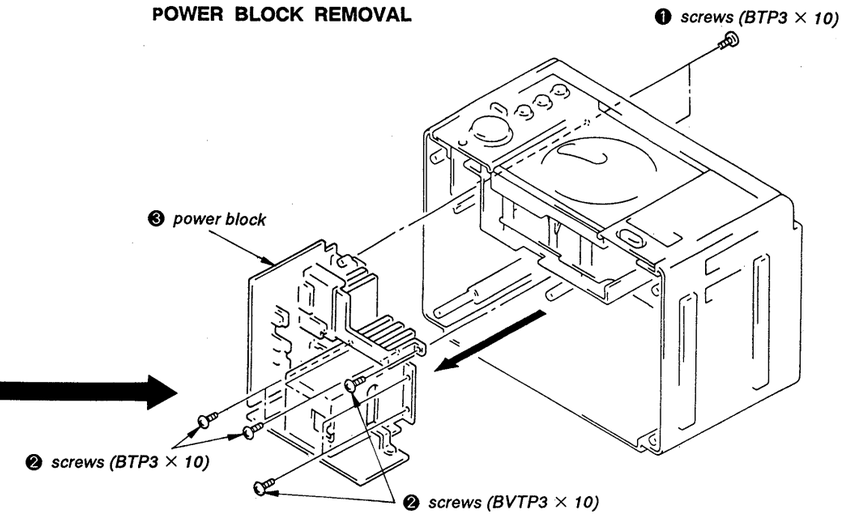
SECTION 3
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

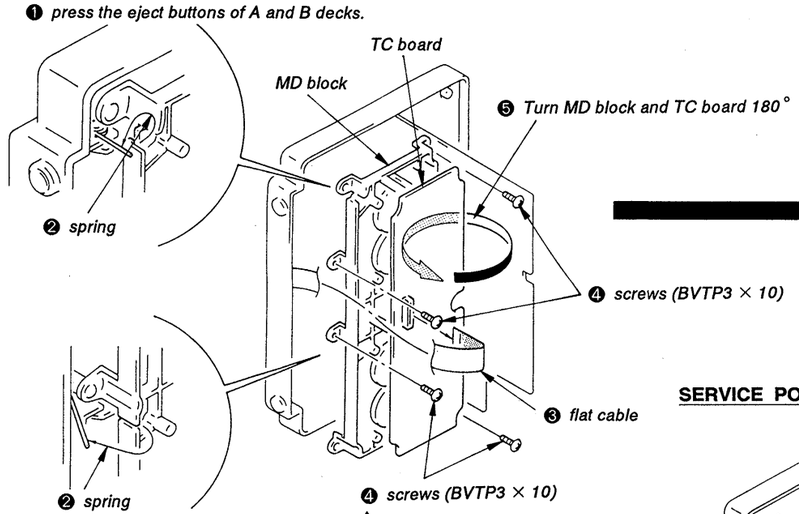
FRONT CABINET AND TOP PANEL REMOVAL


❹ knobs (GEQ)
❻ screws (BTP3 × 10)
❺ knob (VOL)
❻ screws (BTP3 × 10)
❽ top panel ass'y
❼ screws (BVTP3 × 10)
❷ screws (3 × 62)
❶ battery lid
❷ screws (3 × 62)
❸ front cabinet ass'y

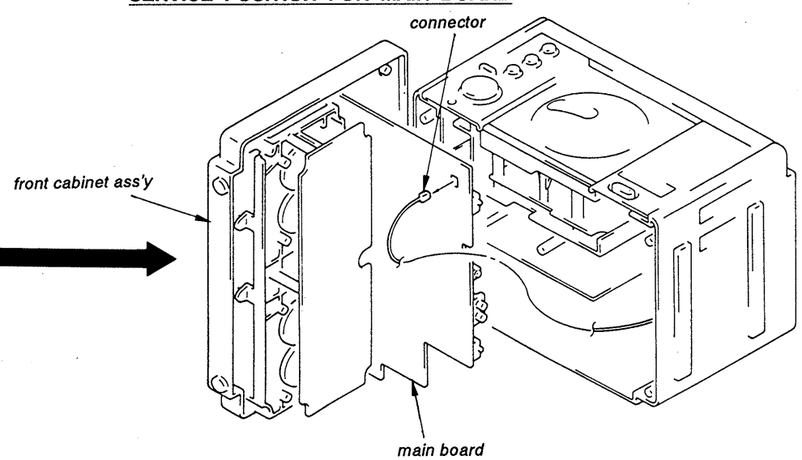
POWER BLOCK REMOVAL



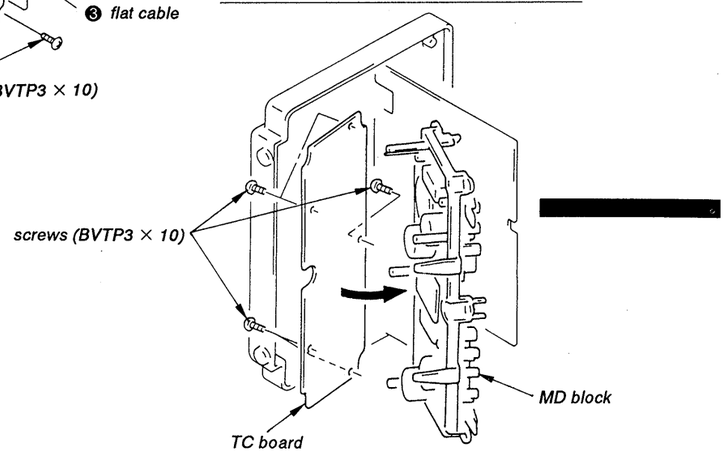
MD BLOCK REMOVAL


❶ press the eject buttons of A and B decks.
TC board
MD block
❺ Turn MD block and TC board 180°
❷ spring
❹ screws (BVTP3 × 10)
❸ flat cable
❷ spring
❹ screws (BVTP3 × 10)

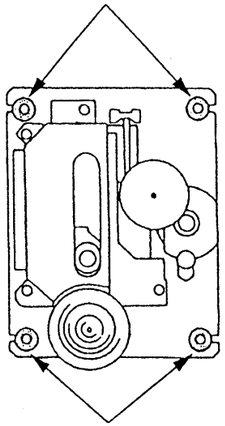
SERVICE POSITION FOR MAIN BOARD



SERVICE POSITION FOR MD BLOCK

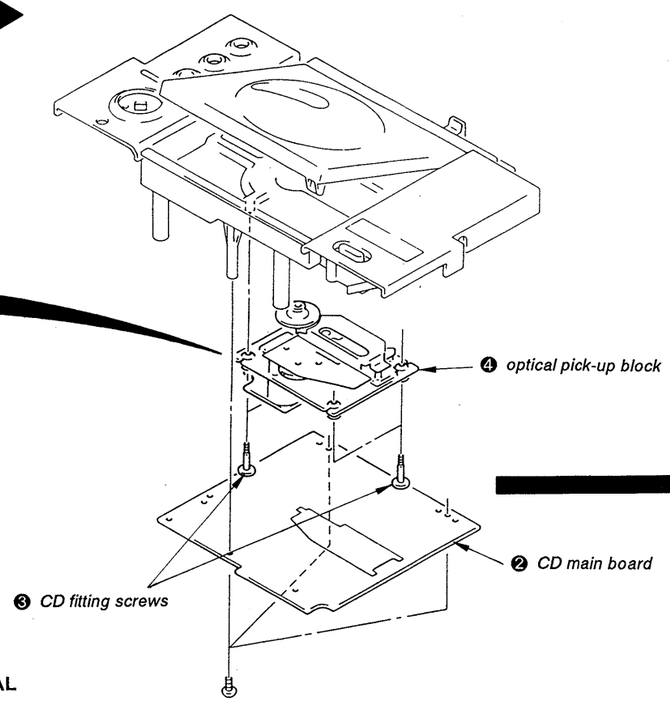


damper (red)

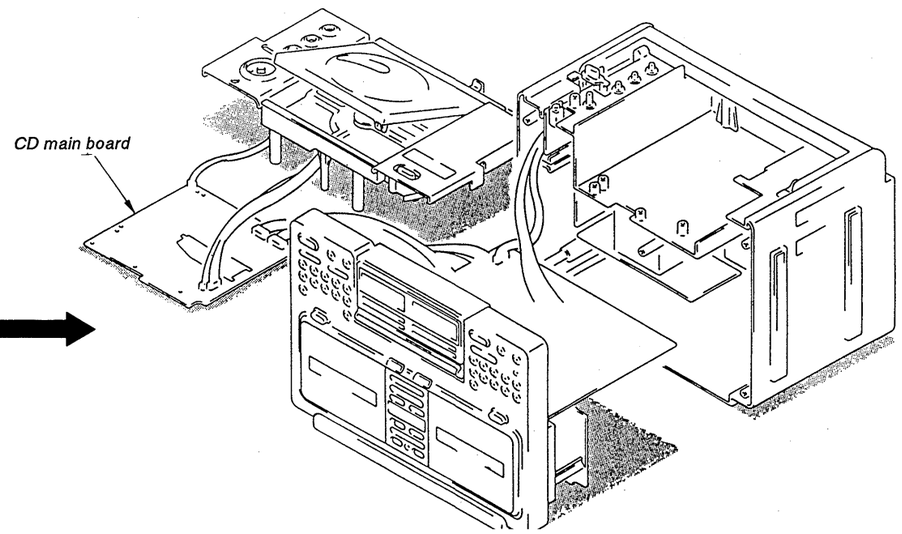


damper (green)

OPTICAL PICK-UP BLOCK REMOVAL

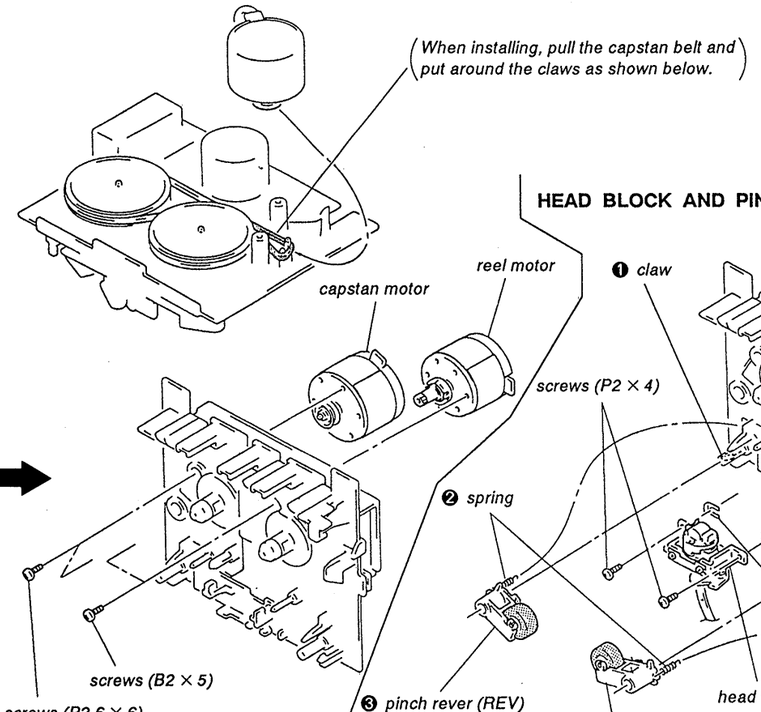


SERVICE POSITION FOR CD MAIN BOARD

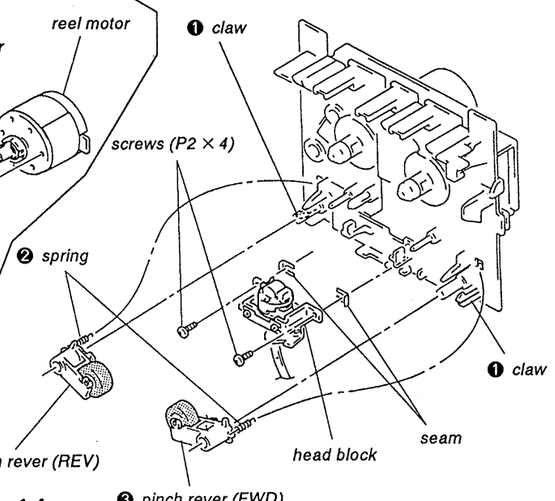


CAPSTAN MOTOR AND REEL MOTOR REMOVAL

❶ screws (BVTP3 × 10)


When installing, pull the capstan belt and put around the claws as shown below.
capstan motor
reel motor
screws (B2 × 5)
screws (P2.6 × 6)

HEAD BLOCK AND PINCH LEVER REMOVAL



SECTION 4
ADJUSTMENTS

4-1. MECHANICAL ADJUSTMENT

TAPE RECORDER SECTION

PRECAUTION

1. Clean the following parts with a denatured-alchohol-moistened swab:
   record/playback head — pinch rollers
   erase head — rubber belts
   capstans — idlers
2. Demagnetize the record/playback/erase head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed in the order given in this service manual.

Torque Measurement

DECK A, B:

Mode	Torque Meter	Meter reading
FWD	CQ-102C	30 – 55 g•cm (0.42 – 0.76 oz•inch)
FWD back tension		1.5 – 5 g•cm (0.02 to 0.06 oz•inch)
REV	CQ-102RC	30 – 55 g•cm (0.42 – 0.76 oz•inch)
REV back tension		1.5 – 5 g•cm (0.02 to 0.06 oz•inch)
FF	CQ-201B	150 – 180 g•cm (2.08 – 2.49 oz•inch)

Tape Tension

DECK A, B:

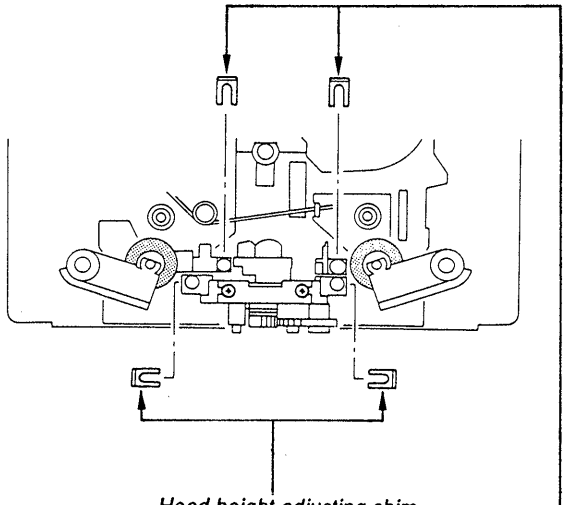
Mode	Tension Meter	Meter reading
FWD	CQ-403A	more than 100g (more than 1.38 oz•inch)
REV (Deck B)	CQ-403R	

Head Height Adjustment DECK B

Adjustment Procedure:

1. Insert a mirror cassette CQ-009C.
2. Make the set to FWD playback mode.
3. Loosen the FWD tape guide fixing screw and adjust with inserting the adjusting shim to eliminate tape curl and tape twist in the portions of tape guide and head.
4. Make the set to REV tape guide fixing screw and adjust with inserting the adjusting shim to eliminate tape curl and tape twist in the portions of tape guide and head.
5. Loosen the REV tape guide fixing screw and adjust with inserting the adjusting shim to eliminate tape curl and tape twist in the portions of tape guide and head.
6. After adjsutment, apply suitable locking compound to the fixing screws.

Adjustment Location:



Head height adjusting shim

Part No.	T
3-336-274-01	0.1
3-336-274-11	0.2
3-336-274-21	0.3

Tape guide height adjusting shim

Part No.	T
4-932-603-01	0.1
4-932-603-11	0.2

4-2. ELECTRICAL ADJUSTMENTS

TAPE RECORDER SECTION

PRECAUTION

1. Adjustments should be performed in the order given.
   Generally playback circuit adjusments should be completed before performing recording circuit adjustments.
2. Adjustments should be performed for both L-ch and R-ch.
   Switches and controls should be set as follows unless otherwise specified.

- **Positions of switches and control knobs**

FUNCTION ..... TAPE
ISS 2
DIRECTION MODE ..... ⇆
Volume ..... standard output level position
ROTARY EQUALIZER ..... center LEVEL

- **Standard input level**

Input Pin	MIX MIC
Signal source impedance	300 Ω
Input signal level	2.5 mV (− 50 dB)
Frequency	1 kHz

- **Standard output level**

Output Pin	SP OUT (L. R)	PHONES	DOLBY OUT
Signal source impedance	4Ω	32Ω	no-load
Output signal level	0.775 V (0 dB)	0.245 V (− 10 dB)	0.18 V (− 12.7 dB)

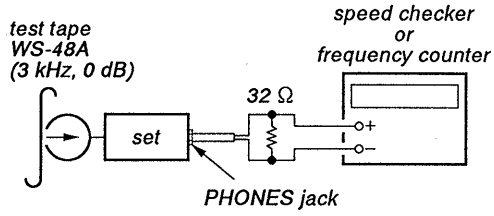
0 dB=0.775 V

- **Test tape**

Test Tape	Signal	Used for
WS-48A	3 kHz, 0 dB	Tape speed adjustment
P-4-A100	10 kHz, − 10 dB	Head azimuth and phase adjustment
P-4-L300	315 Hz, 0 dB	PB level adjustment
CS-122	–	Recording bias and Recording level adjustment

Tape Speed Adjustment DECK A DECK B

Procedure:
Mode: FWD playback



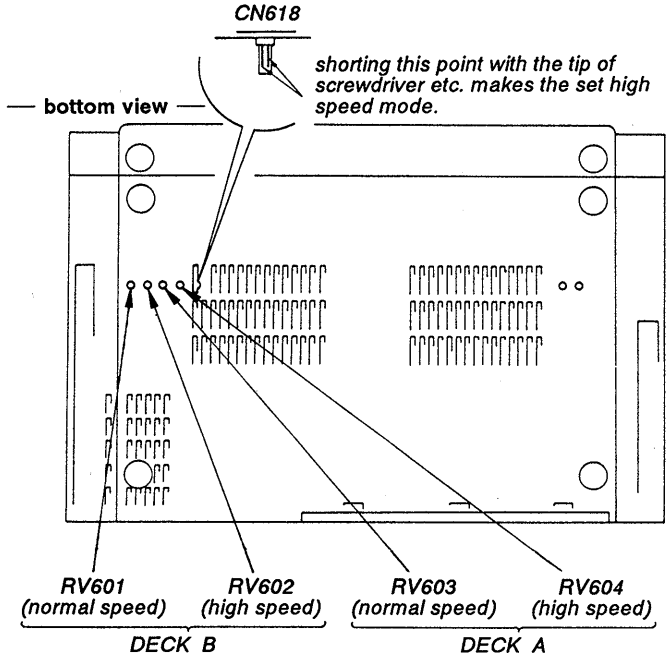
Perform high speed adjsutment before normal speed adjustment.
Playback the test tape WS-48A and adjust to meet the specifications below.

Adjustment Value:

Speed	deck	Adjustment part	test pin CN618	speed checker heading	frequency counter reading
high	A	RV604	short	− 1.17 to − 0.83%	5,940 ± 10 Hz
	B	RV602			
normal	A	RV603	open	− 1.17 to − 0.83%	2,970 ± 5 Hz
	B	RV601			

Frequency difference between FWD and REV should be within 1%

Adjustment Location: TC board

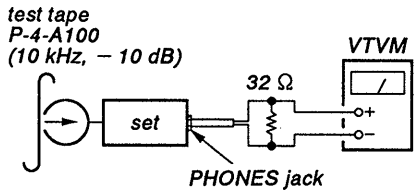


Record/Playback Head Azimuth Adjustment

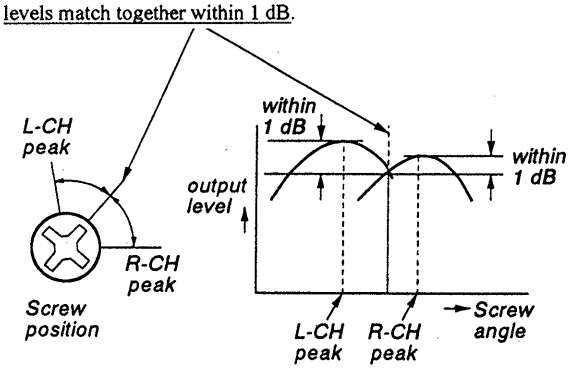
DECK B

Procedure:

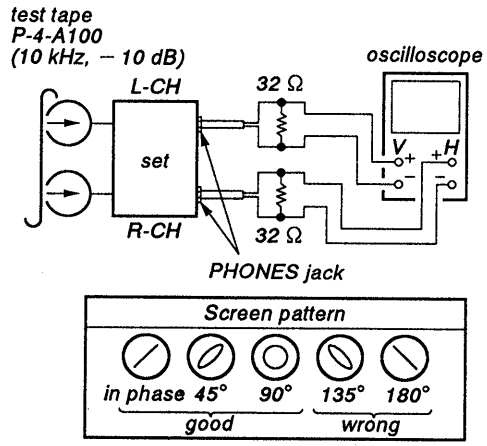
1. Mode: FWD/REV playback



2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.

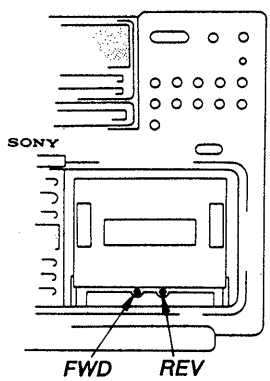


3. Phase Check
   Mode: FWD/REV playback



4. Set in the REV mode and repeat the step 1 to 3.
5. After the adjustment, lock the screws with locking compound.

Adjustment Location: Record/Playback head

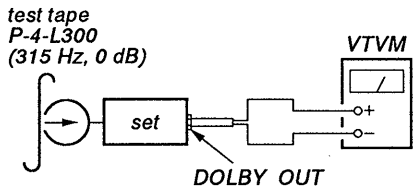


Playback Level Adjustments DECK A DECK B

Procedure:

– playback –

- VOLUME ····· standard output level position (See page 17).



Adjust with RV102 (L-ch), RV202 (R-ch): Deck A and RV101 (L-ch), RV201 (R-ch), Deck B so that the output level becomes to the adjustment value.

Adjustment Value: – 12.4 dB – – 13.0dB (0.19 – 0.17 V)
Level differance between channels: within 0.3 dB

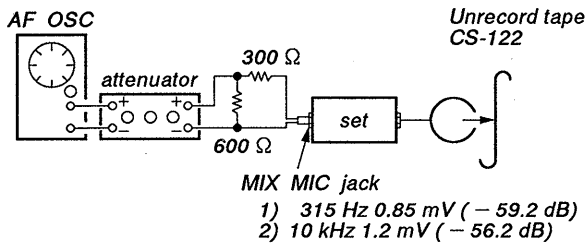
Confirm the playback level doesn't change on repeating playback and stop.

Adjustment Location: TC board (See page 19).

Recording Bias Adjustment DECK B

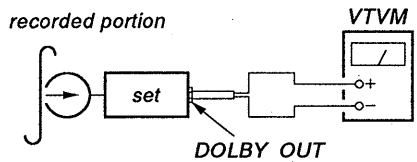
Procedure:

1. Record



2. Playback

- VOLUME ····· standard output level position. (See page 17).



3. Playback the recorded signal on item 1, and comfirm the signal level becomes to the adjustment value. When it is out of order, adjust with RV103 (L-ch) and RV203 (R-ch) and repeat items 1 to 3.

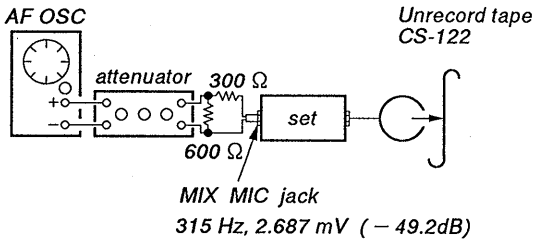
Adjustment Value: 10 kHz playback level difference adjsut 315 Hz playback level; – 0.5 to +0.5 dB.

Adjustment Location: TC board (See page 19).

Recording Level Adjsutment DECK B

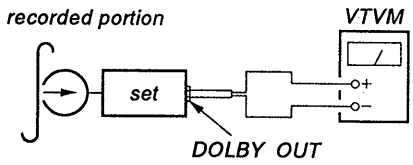
Procedure:

1. Record



2. Playback

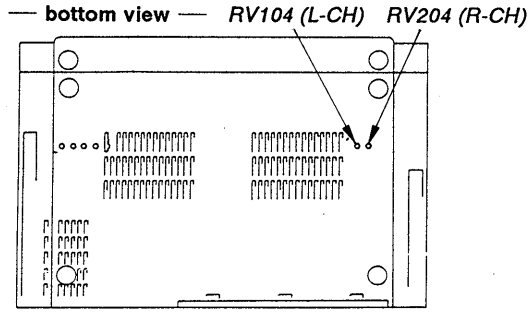
• VOLUME ····· Standard output level position. (See page 17)



3. Playback the recorded signal on item 1, and confirm the signal level becomes to the adjustment value.
   When it is out of order, adjust with RV104 (L-ch) and RV204 (R-ch) and repeat items 1 to 3.

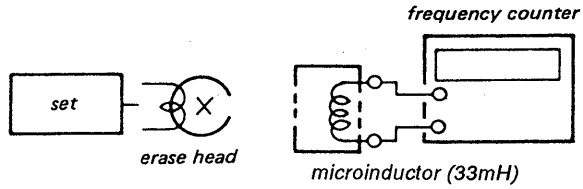
Adjustment Value: 0 ± 0.5 dB against the monitor output level before recording

Adjustment Location: TC board



Recording Bias Oscillation Frequency Adjustment

Procedure :



1. Put into no-signal state.
2. Bring the microinductor, which is connected to the frequency counter, close to the erase head core.
3. When the ISS switch is at 2, adjust T301 for 107.5 kHz ± 2 kHz.

Adjustment Location: TC board

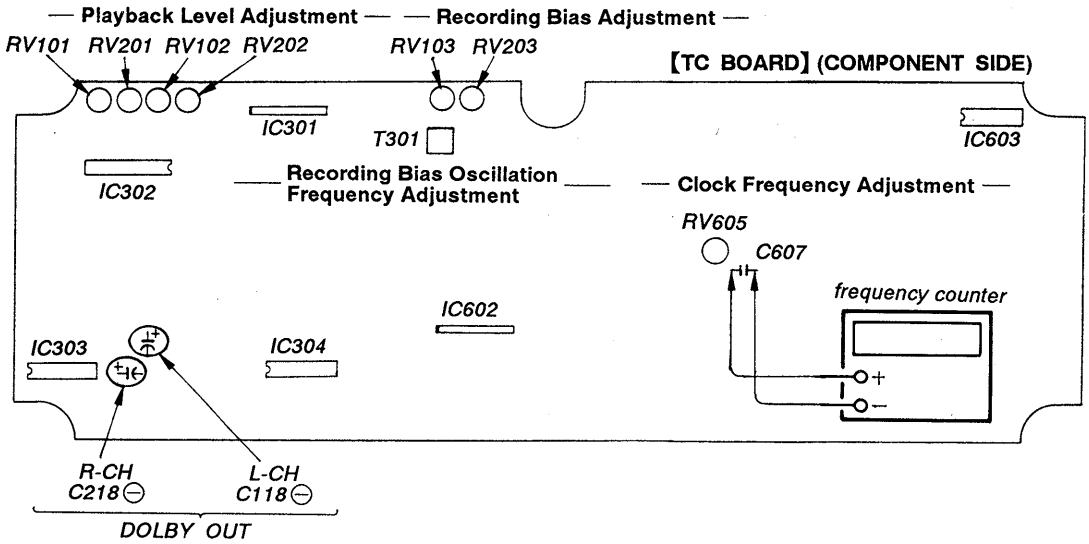
Clock Frequency Adjustment

Procedure:

Turn on the power and adjust with RV605 so that the reading on the frequency counter becomes 6.4 kHz ± 40 Hz at the both sides of C607.

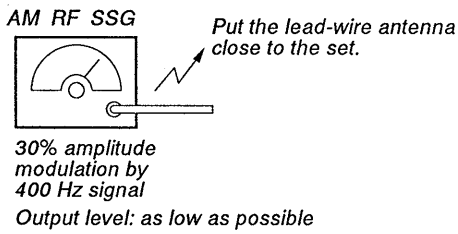
Adjustment Location: TC board

[Adjustment Location]

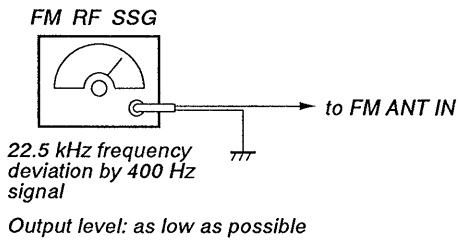


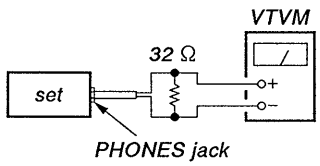
TUNER SECTION

[AM]
BAND switch: AM


AM RF SSG
Put the lead-wire antenna close to the set.
30% amplitude modulation by 400 Hz signal
Output level: as low as possible

[FM]
FUNCTION switch: FM





- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM FREQUENCY COVERAGE ADJUSTMENT		
Frequency indication	530 kHz	1,710 kHz
Reading on digital voltmeter	1.9 ± 0.1 V	within 8.0 – 9.0 V
Adjusting element	L 3	check

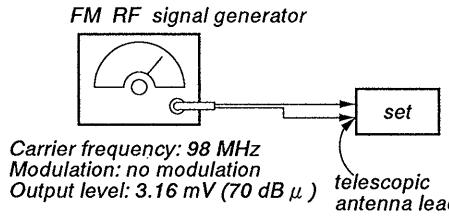
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L4	620 kHz
CT2	1,400 kHz

FM FREQUENCY COVERAGE ADJUSTMENT		
Frequency indication	87.5 MHz	108 MHz
Reading on digital voltmeter	3.5 ± 0.1 V	10 ± 1.5 V
Adjusting element	L 2	check

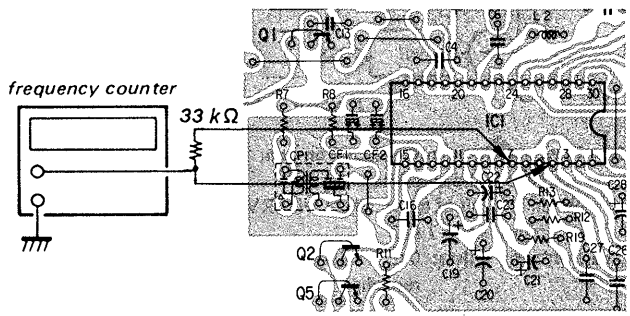
FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L1	87.5 MHz
CT1	108 MHz

FM VCO ADJUSTMENT

A) Regular Method
Procedure:

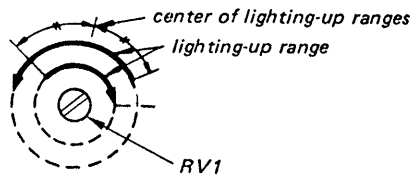


1. Connect frequency counter to the positions shown below.
2. Tune the set to 98 MHz.
3. Adjust RV1 for 76 kHz ± 500 Hz reading on the frequency counter.

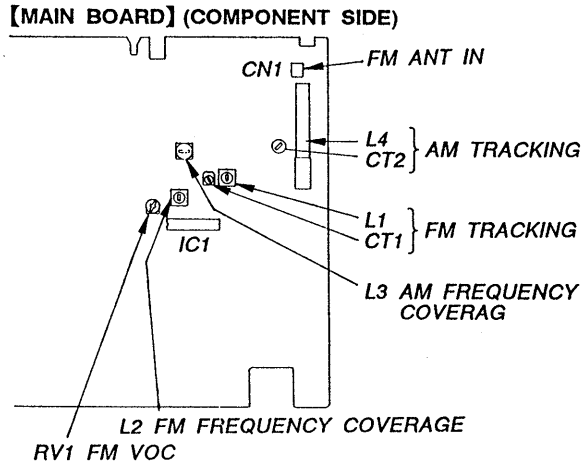


B) Simple Method
Procedure:

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RV1 clockwise or counterclockwise and memorize the lighting-up range of the FM STEREO lamp.
3. Secture RV1 at the center of the lighting-up range of both turns as shown below.



[MAIN BOARD] (COMPONENT SIDE)



CD SECTION

Notes on Adjustment

1. Perform adjustment in service mode.
   After adjustment, be sure to release service mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18, Part No. 3-702-101-01) only when so indicated.

Before Adjustment

Put the set into service mode and perform the following checks. Repair if there are any problems.

- **Sled Motor Check**

1. Press ▌▌ key, then press ■ key.
2. Press ▶▶| , |◀◀ keys and comfirm that the FOP moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.
   ▶▶| : FOP moves to the outer circumference
   |◀◀ : FOP moves to the inner ciecumference

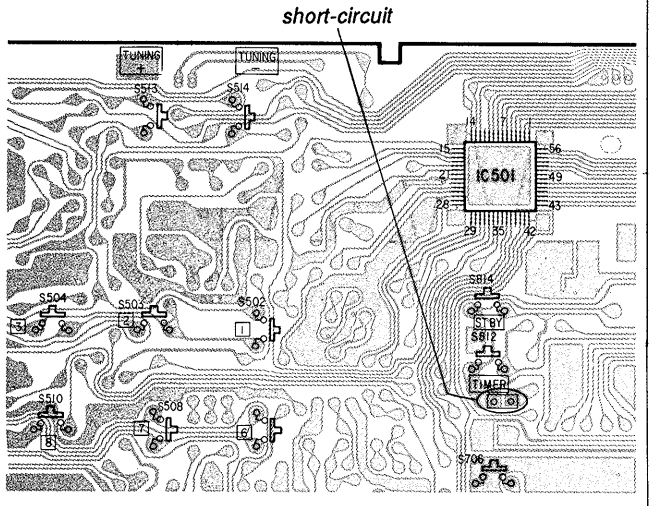
- **Focus Search Check**

1. Press ▶ key. (Focus search operation is performed continuously.)
2. Look at the FOP objective lens and confirm that it moves up and down smoothly, with no catching or abnormal noises.
3. Press ■ key.
   Confirm that focus search operation stops. If it does not, press ■ key again longer.

How to Put the Set into Service Mode

1. Short-circuit following portions on the CD main board.
2. Turn the POWER on.
3. Remove the short-circuit position.

CONTROL BOARD (conductor side)

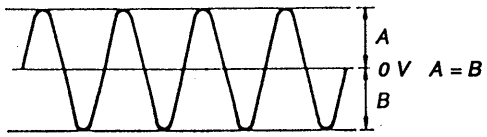


E-F Balance Adjustment

This adjustment is to be done when the optical block is replaced.

Adjustment Procedure:

1. Connect the oscilloscope between IC701 pins ① and ⑧.
2. Put the set into service mode. (See page 17)
3. Press the ▶▶| and |◀◀ keys to move the FOP to the center.
4. Insert disc (YEDS-18) and press ▶ key.
5. Adjust RV701 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.
6. Release servise mode after adjustment is completed.

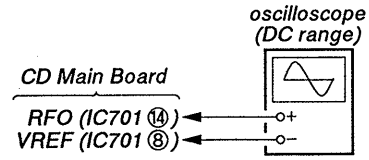


VOLT/DIV: 1 V
TIME/DIV: 1 ms

Focus Bias Adjustment

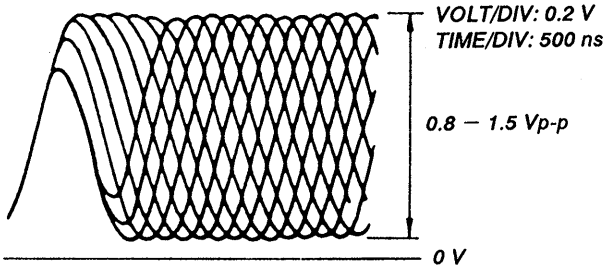
This adjustment is to be done when the optical block replaced.

Adjustment Procedure:



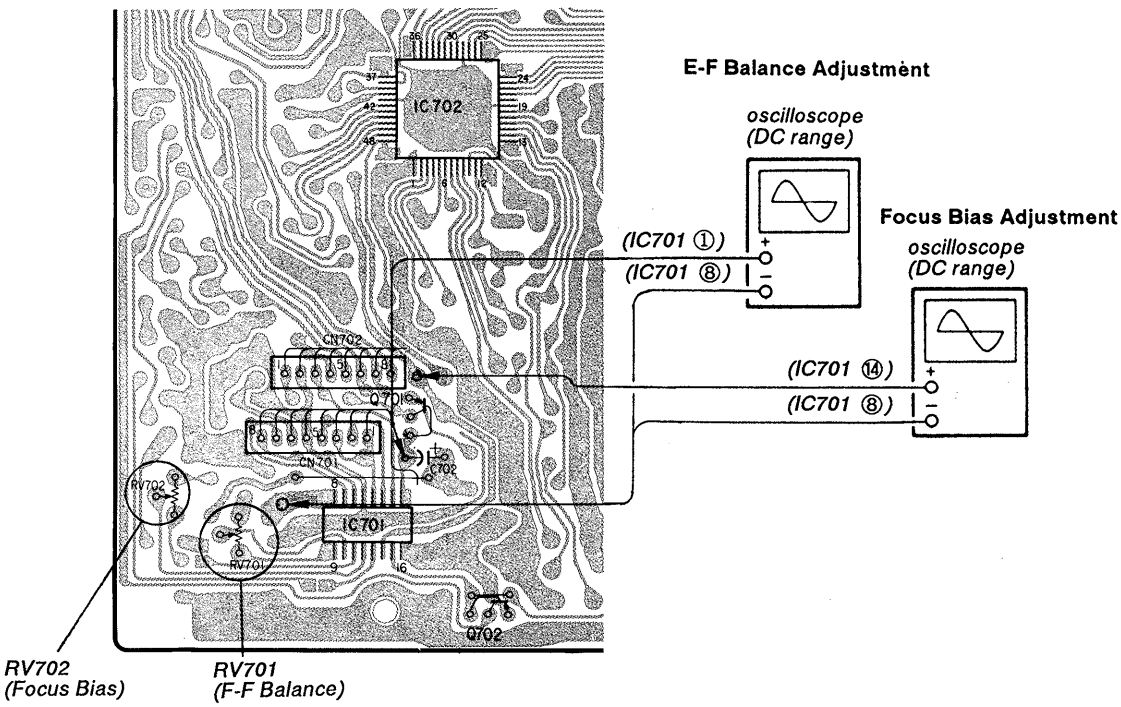
1. Connect the oscilloscope between IC701 pins ⑭ and ⑧.
2. Put the set into service mode. (See page 17)
3. Press the ▶▶| and |◀◀ keys to move the FOP to the center. (Move the FOP to the music area on the disc to enable easy visibility of the eye pattern.)
4. Insert disc (YEDS-18) and press ▶ key.
5. Adjust RV702 so that the oscilloscope waveform os as shown in the figure below (eye pattern).
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.
6. Release service mode after adjustment is completed.

- RF signal reference waveform (eye pattern)



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensivity.

Adjustment Location: CD Main Board (conductor side)



Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.
However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.
Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.
However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

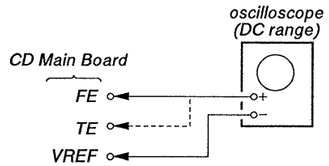
Symptoms / Tracking	Gain	Focus
• The time until music starts becomes longer for STOP ➡ ▶ PLAY or automatic selection (⏮ , ⏭ buttons pressed). (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP ➡ ▶ PLAY or automatic selection (⏮ , ⏭ buttons pressed).	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More poise during 2-axis device operation.	high	high

The following is a simple adjustment method.

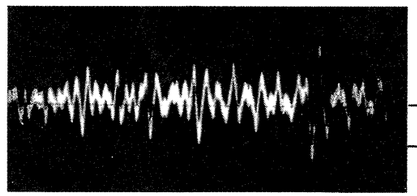
– Simple Adjustment –

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure:

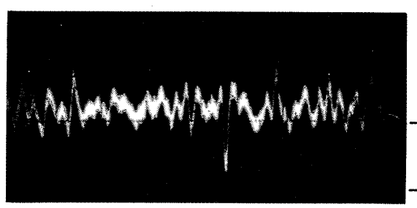


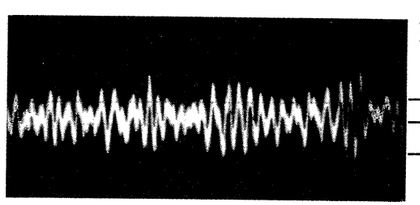
1. Keep the set horizontal.
   (If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Insert disc (YEDS-18) and press ▶ PLAY button.
3. Connect the oscilloscope between IC701 pins ⑬ and ⑧.
4. Adjustment RV703 so that the waveform is as shown in the figure below. (focus gain adjustment)



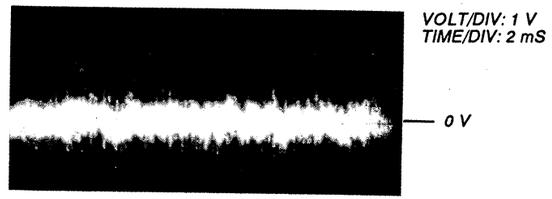
- Incorrent Examples (DC level changes more than on adjusted waveform)

low focus gain



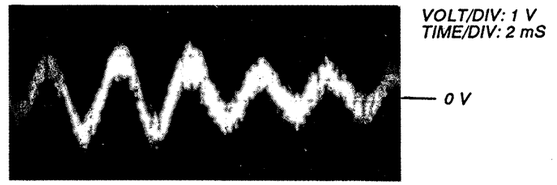


5. Connect the oscilloscope between IC701 pins ⑪ and ⑧.
6. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)

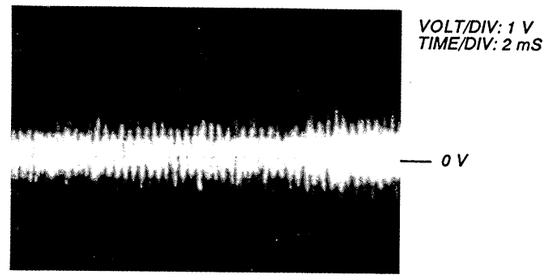


- Incorrect Examples (fundamental wave appears)

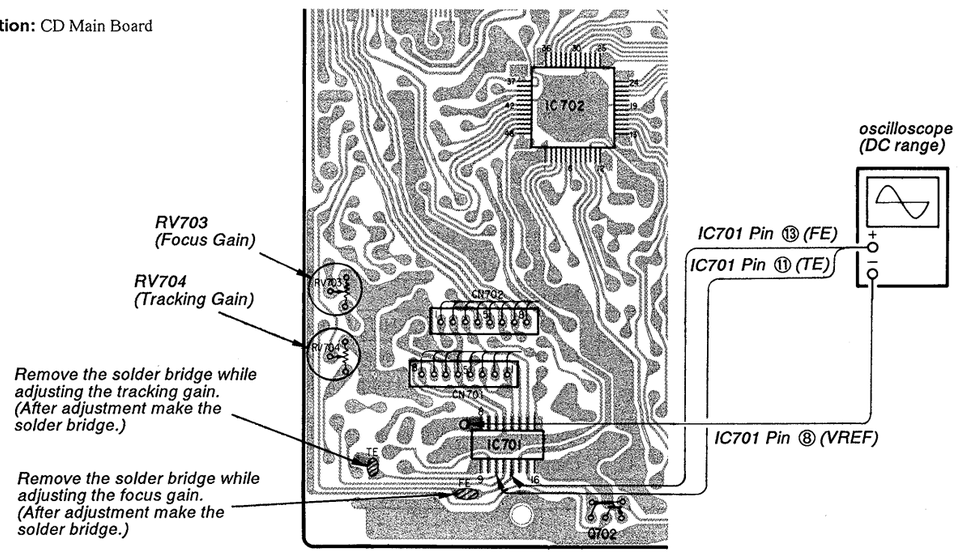
low tracking gain



high tracking gain
(higher fundamental wave than for low gain)



Adjustment Location: CD Main Board

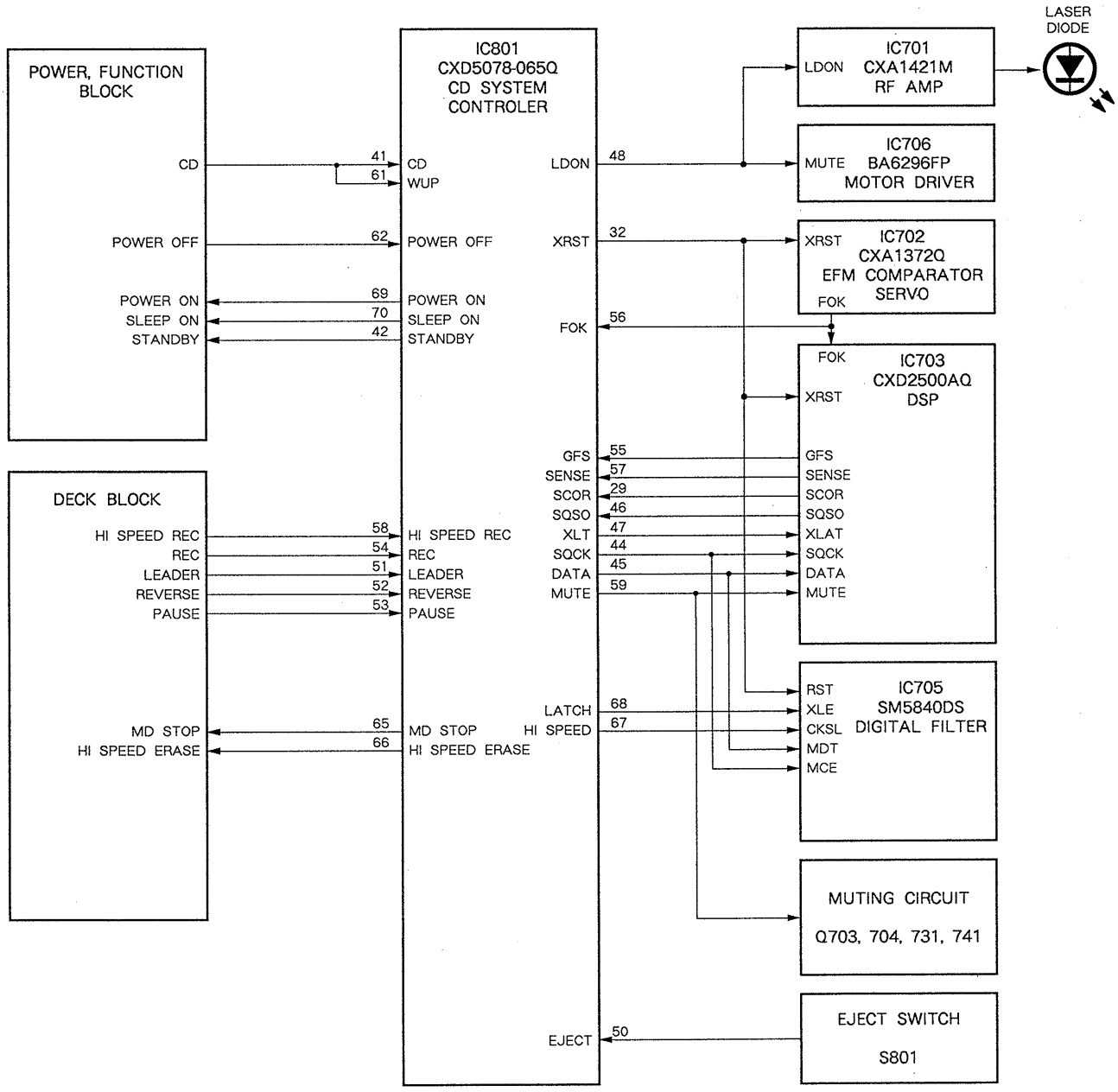


• IC801 CXP5078-065Q CD SYSTEM CONTROLLER

Pin No.	Pin Name	I/O	Description
1 – 19	SEG18 – SEG0	O	Output port for LCD segment signal
20 – 23	COM3 – COM0	O	Output port for LCD common signal
24 – 26	VLC1 – VLC3	–	Port for LCD bias voltage
27	VL	O	Control port for cut-off the current flow in the LCD bias resistor of external
28	RMIN	I	Remote control signal input from SIRCS receiver
29	SCOR	I	Sub code syncro signal detection input from IC703 (CD DSP)
30	XTAL	O	Output for clock oscillation circuit (3.58MHz)
31	EXTAL	I	Input for clock oscillation circuit
32	$\overline{\text{RST}}$	O	Reset signal output for IC702 (servo), IC703 (CD DSP), IC705 (Digital Filter)
33	N. C.	–	Not used (+5V)
34	VDD	–	Power supply terminal (+5V)
35 – 40	KEY0 – KEY5	I	Key input (analog)
41	CD	I	CD select (S302) input. CD: "H"
42	STANDBY	O	Output for power switch on timer mode. Timer standby mode: "H"
43	N. C.	–	Not used (open)
44	SQCK	O	Sub code (Q data) readout clock output to IC703 (CD DSP)
45	DATA	O	Serial data output to IC702 (servo) and IC703 (CD DSP)
46	SQSO	I	Subcode (Q data) serial input from IC703 (CD DSP)
47	$\overline{\text{XLT}}$	O	Serial data latch output to IC702 (servo) and IC703 (CD DSP)
48	$\overline{\text{LD ON}}$	O	Optical pick-up laser diode ON/OFF switching and motor driver (IC706) muting output. H: on
49	12/$\overline{24}$	I	12 or 24 hour cycle (clock) select input. "L": 24H, "OPEN": 12H
50	$\overline{\text{EJECT}}$	I	CD lid OPEN/CLOSE switch (S801) input. OPEN: "L", CLOSE:"H"
51	LEADER	I	DECK B leader tape detection input. "H": LEADER TAPE
52	REVERSE	I	DECK B reverse switch (S604) input. Reverse: "H"
53	$\overline{\text{PAUSE LED}}$	I	DECK B PAUSE LED ON/OFF detection input. "L": PAUSE
54	$\overline{\text{REC}}$	I	DECK B REC switch (S301) input. REC: "L"
55	GFS	I	Frame syncro signal clock status input from IC703 (CD DSP). "L": NG, "H": OK
56	FOK	I	Focus OK input from IC702 (servo). "H": OK
57	SENSE	I	Input of signal representing the internal status of IC702 (servo) and IC703 (CD DSP)
58	HI SPEED	I	High speed record mode detection input. "H": High speed record mode
59	MUTE	O	Muting control output. "H": MUTE
60	N. C.	–	Not used (open)
61	WUP	I	Wake up input for standby mode cancel
62	POWER OFF	I	Power-off detection input. "L": OFF
63	$\overline{\text{XRST}}$	I	System reset input
64	N. C.	–	Not used (open)
65	MD STOP	O	DECK B stop output. SHUT OFF (STOP): "H"
66	HI SPEED ERASE	O	DECK B high speed erase signal control output. "H": High speed erase mode
67	HI SPEED CD	O	Play back mode control output to IC706 (Digital filter). "L": High speed recode mode
68	$\overline{\text{LATCH (DF)}}$	O	Serial data latch output to IC706 (Digital filter)
69	POWER ON	O	Output for power switch on timer mode. Timer ON: "H"
70	SLEEP ON	O	Output for power switch on sleep mode

Pin No.	Pin Name	I/O	Description
71	GND	–	Power supply terminal (GND)
72	TX	O	Output for clock oscillation circuit
73	N. C.	–	Not used (open)
74	TEX	I	Input for timer clock oscillation circuit (32.768kHz)
75	VREF	–	Not used (open)
76 – 80	SEG23 – SEG19	O	Output port for LCD segment signal

• CD SECTION GENERAL BLOCK DIAGRAM

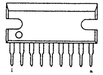


SECTION 5
DIAGRAMS

• SEMICONDUCTOR LEAD LAYOUTS

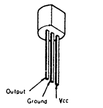
BA3707
BA6208

LA4620

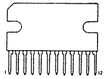


BA3823LS

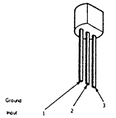
PST529H
PST529J



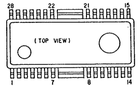
BA3924



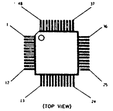
RE5RA30A-C
RE5RA50A-C
S-80741AL
S-81250HG



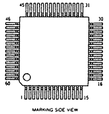
BA6296FP



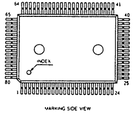
CXA1372Q



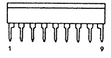
TC9315F



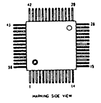
CXD2500AQ
CXP-5078-065Q



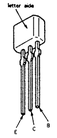
μ PC1330HA



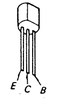
μ PD1724GB-516-1A7



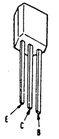
2SA1175-HFE
2SC2785-HFE
2SC2786-L
BNIL3Z-K
DTC114TS
DTC343TS



2SA950-Y
2SB1013-4
2SC2001-K2

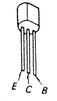


2SA933S-QR
2SC2458L-GR
2SC2724-C
2SC4048
DTA114TS
DTA114YS
DTA124ES
DTA143ZS
DTC114TS
DTC144WS
RN2206



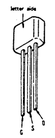
2SB1370-EF
2SD1408-Y

2SC3070
2SD788-5

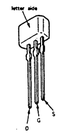


2SK105A-30

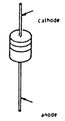
2SK193



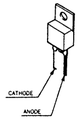
2SK514-H



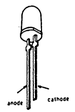
1SR139-100
1SS119
RD2.7ES-B2
RD16ES-B3
RD2.2ES-B2
RD3.6ES-B2
RD5.6ES-B2
RD6.2ES-B2
RD7.5ES-B2
RD8.2ES-B2



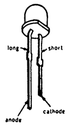
D5S4M



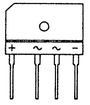
GL5EG8
GL5PR8



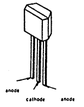
MAY3371X-M-177
MBG3371X-177
MVR3371X



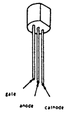
RBV-602-01



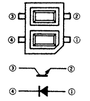
SVC203RA-V



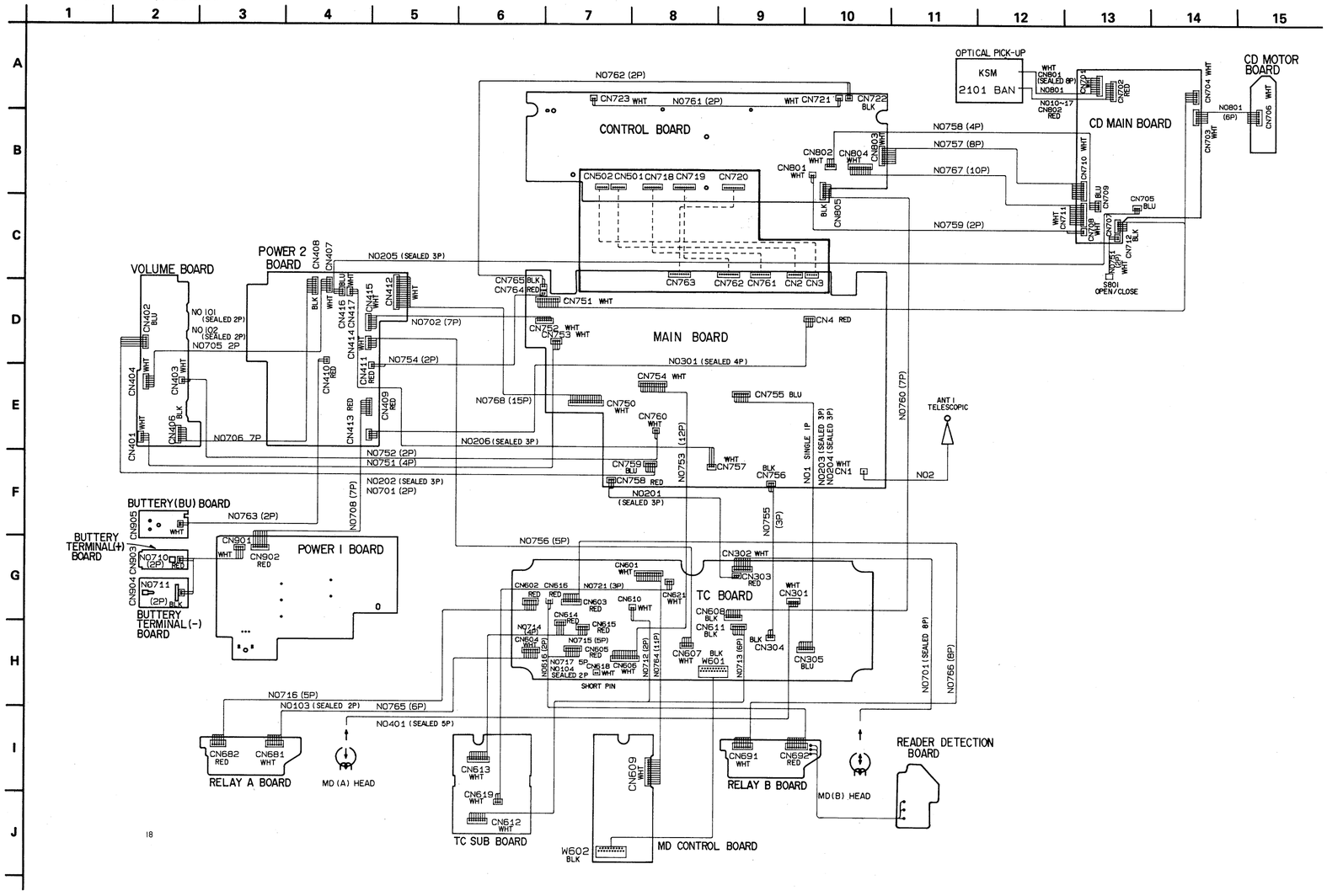
SVC342LM-V



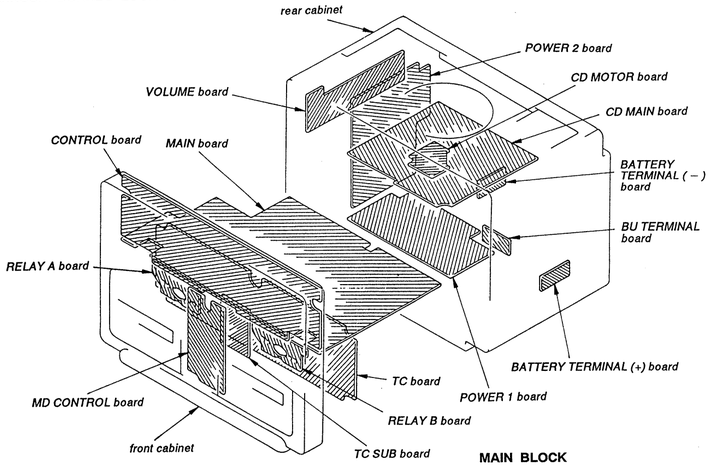
GP-2S09-B



5-1. FRAME SCHEMATIC DIAGRAM



• CIRCUIT BOARDS LOCATION



MAIN BLOCK

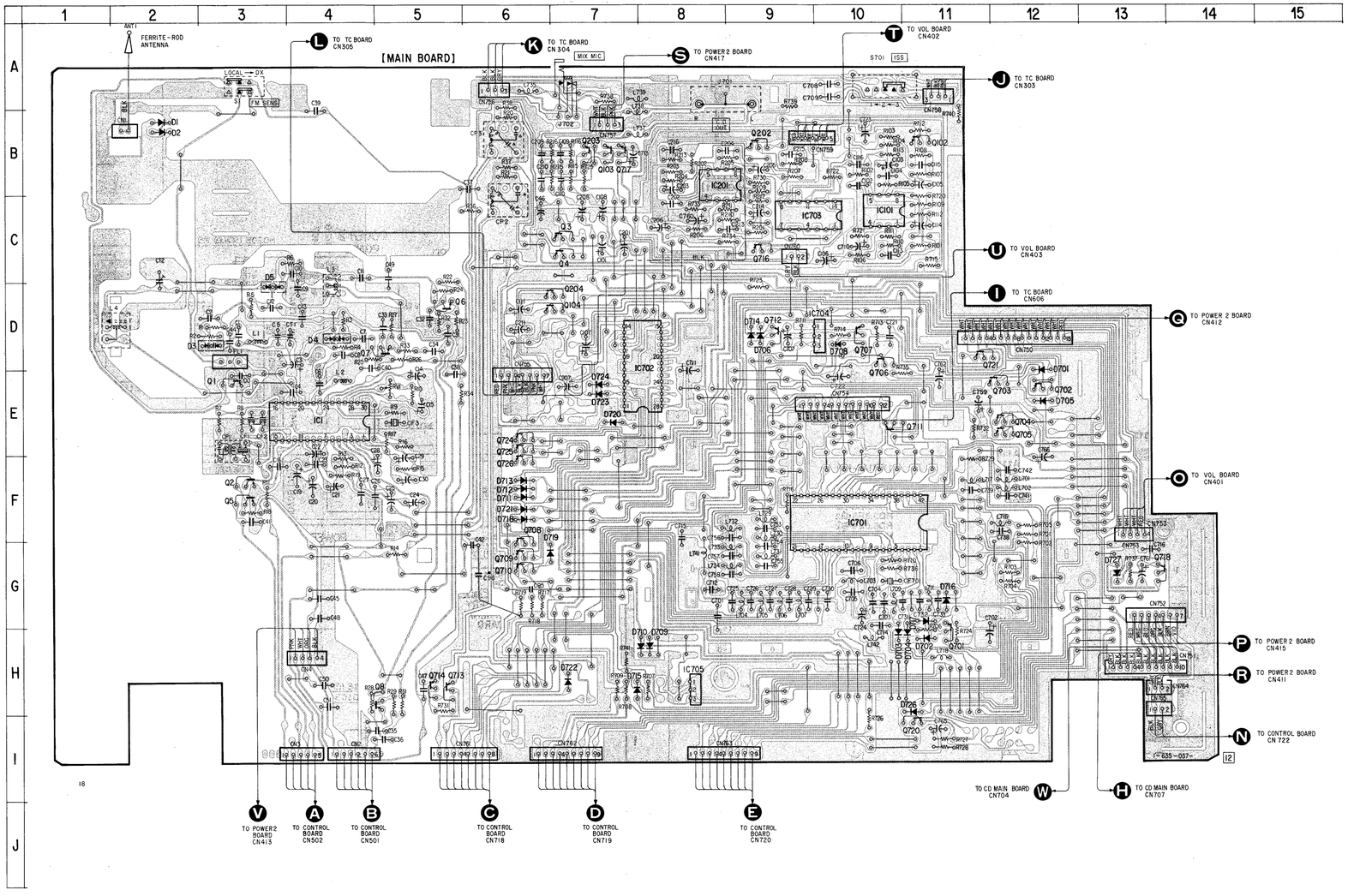
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D1	B-2	Q1	E-3
D2	B-2	Q2	F-3
D3	D-3	Q3	C-7
D4	D-4	Q4	C-7
D5	D-3	Q5	F-3
D701	E-12	Q6	D-5
D702	H-11	Q7	D-5
D703	H-10	Q8	H-5
D704	H-11	Q102	B-11
D705	E-12	Q103	B-7
D706	D-9	Q104	D-7
D708	D-10	Q202	B-9
D709	H-8	Q203	B-7
D710	H-8	Q204	D-7
D711	F-6	Q701	H-11
D712	F-6	Q702	E-12
D713	F-6	Q703	E-12
D714	D-9	Q704	E-12
D715	H-7	Q705	E-12
D716	G-11	Q706	D-10
D717	G-11	Q707	D-10
D718	F-6	Q708	G-6
D719	G-6	Q709	G-6
D720	E-7	Q710	G-6
D721	F-6	Q711	E-10
D722	H-7	Q712	D-9
D723	E-7	Q713	H-5
D724	E-7	Q714	H-5
D726	H-11	Q716	C-9
D727	G-13	Q717	B-7
		Q718	G-13
IC1	E-4	Q720	I-11
IC101	C-10	Q721	D-11
IC201	B-8	Q724	E-6
IC701	F-10	Q725	E-6
IC702	D-8	Q726	F-6
IC703	C-9		
IC704	D-10		
IC705	H-8		

Note:

- ○—— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.

5-2. MAIN BLOCK PRINTED WIRING BOARDS • See Page 27 for Semiconductor Lead Layouts



Note:

- **All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.**
- **All resistors are in Ω and ¼ W or less unless otherwise specified.**
- **% : indicates tolerance.**
- **△ : internal component.**
- : B+ Line.
- : adjustment for repair.
- Power voltage is dc 12 V and fed with regurated dc power supply from external BATTERY TERMINAL.
- Voltages is dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW
  < > : LW
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⇛ : CD
  ⇨ : PB (DECK B) ⇨ : REC (DECK B)

【MAIN BOARD】

IC1 CXA1238S FM/AM FRONT END, IF AND FM MIX

IC101 LINE AMP

IC201 LINE AMP

IC701 MICROPROCESSOR SYSTEM CONTROL

IC702 IN/OUT CONTROL

IC703 SPACE SOUND SWITCH

IC704 RADIO POWER SW

IC705 5V REG

TO POWER 2 BOARD CN415

TO CONTROL BOARD CN622

TO CONTROL BOARD CN621

TO TC BOARD CN605

TO CONTROL BOARD CN719

TO VOL BOARD CN401

TO CD MAIN BOARD CN707

TO CD MAIN BOARD CN704

TO POWER 2 BOARD CN415

TO CONTROL BOARD CN622

TO TC BOARD CN603

TO TC BOARD CN604

TO CONTROL BOARD CN722

TO POWER 2 BOARD CN417

TO CONTROL BOARD CN720

TO TC BOARD CN505

TO POWER 2 BOARD CN417

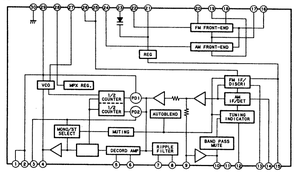
TO VOL BOARD CN402

TO VOL BOARD CN403

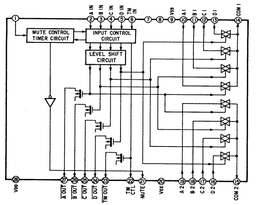
CD OUT

- **IC Block Diagrams**

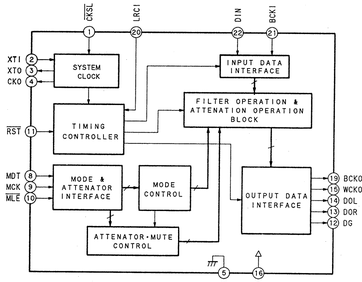
IC1 CXA1238S



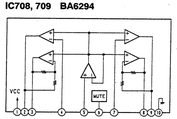
IC702 LC7815H



IC705 SM5840DS



IC708, 709 BA6294



5-4. TC BLOCK SCHEMATIC DIAGRAM

Note:

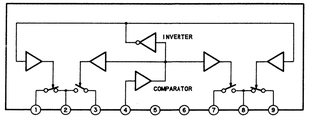
- All capacitors are in μF unless otherwise noted. pF: μμF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- % : indicates tolerance.
- ⚠ : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

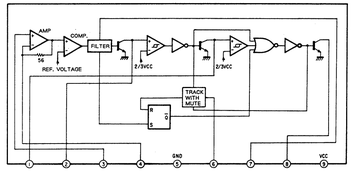
- ⊖ : B + Line.
- ⊕ : adjustment for repair.
- Power voltage is dc 12 V and fed with regurated dc power supply from external BATTERY TERMINAL.
- Voltages is dc with respect to ground under no-signal (detuned) conditions.
  no mark : PB
  ( ) : REC
  * : Impossible to measure the voltage at the marked points.
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : PB (DECK A)
  : PB (DECK B)
  : REC (DECK B)

• IC Block Diagrams

IC301 μPC1330HA



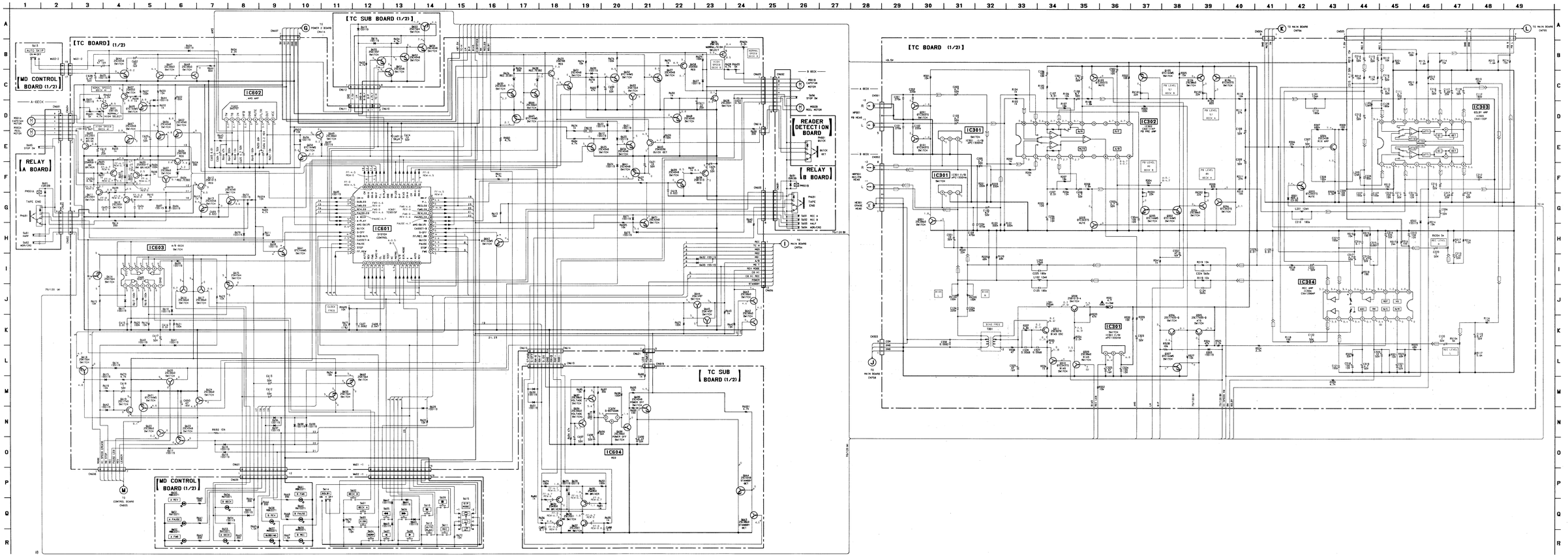
IC602 BA3707

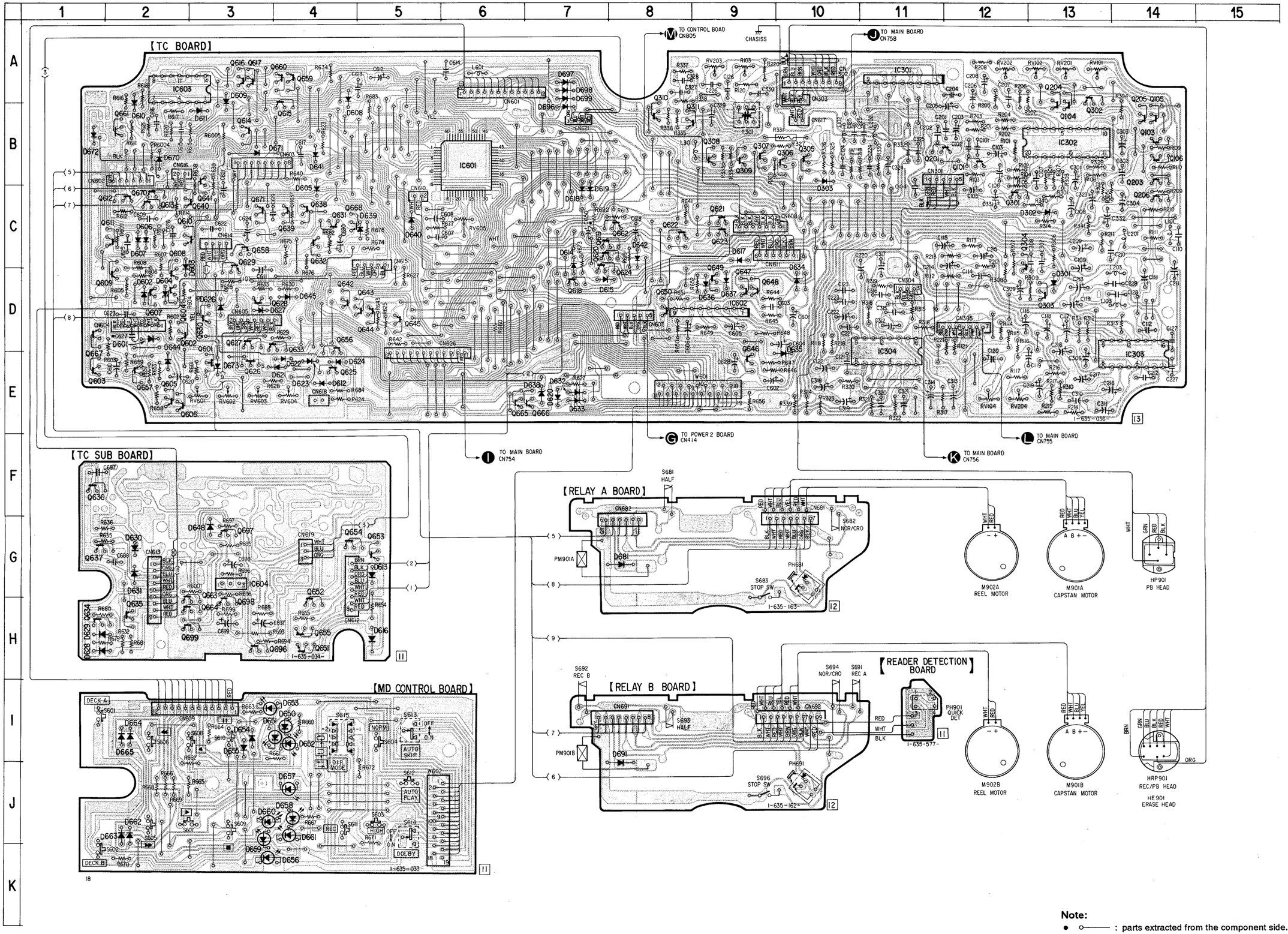


TC BLOCK

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D301	D-13	D618	C-7	D639	C-4	D663	J-2	IC301	A-11	Q302	B-13	Q611	C-2	Q631	C-4	Q651	H-4	Q696	H-3
D302	C-13	D619	C-7	D640	C-5	D664	I-2	IC302	B-13	Q303	D-13	Q612	C-2	Q632	C-4	Q652	H-4	Q697	G-3
D303	B-10	D620	E-7	D641	B-4	D665	I-2	IC303	E-14	Q304	C-12	Q613	C-2	Q633	D-4	Q653	G-5	Q698	H-3
D601	D-2	D621	E-4	D642	C-5	D670	B-2	IC304	D-11	Q305	B-10	Q614	B-3	Q634	H-1	Q654	G-4	Q699	H-3
D602	D-2	D622	E-4	D644	E-2	D671	B-3	IC601	B-6	Q306	B-10	Q615	B-4	Q635	H-2	Q655	H-4		
D603	C-2	D623	E-4	D645	D-4	D672	B-1	IC602	D-9	Q307	B-9	Q616	A-3	Q636	F-1	Q656	D-4		
D604	D-2	D624	E-4	D648	G-3	D673	E-3	IC603	A-2	Q308	B-9	Q617	A-3	Q637	G-1	Q657	E-2		
D605	C-4	D626	D-3	D650	I-4	D681	G-8	IC604	G-3	Q309	B-9	Q618	D-7	Q638	C-4	Q658	C-3		
D606	C-2	D627	D-3	D651	I-4	D691	I-8			Q310	B-8	Q619	C-8	Q639	C-4	Q659	A-4		
D607	C-2	D628	H-1	D652	I-4	D696	B-7	Q101	B-12	Q311	B-8	Q620	C-8	Q640	C-3	Q660	A-4		
D608	A-4	D629	H-1	D653	I-3	D697	A-7	Q1038	B-14	Q601	E-3	Q621	C-9	Q641	C-3	Q661	B-2		
D609	A-3	D630	G-2	D654	I-3	D698	A-7	Q1048	B-13	Q602	D-2	Q622	C-8	Q642	D-4	Q662	C-8		
D610	B-2	D631	G-2	D655	I-3	D699	A-7	Q105	B-14	Q603	E-1	Q623	C-9	Q643	D-5	Q663	G-3		
D611	B-3	D632	E-7	D656	K-3			Q106	B-14	Q604	D-2	Q624	D-8	Q644	D-5	Q664	H-3		
D612	E-4	D633	E-7	D657	J-4			Q201	B-11	Q605	E-2	Q625	E-4	Q645	D-5	Q665	D-3		
D613	G-5	D634	D-10	D658	J-4			Q2038	B-14	Q606	E-2	Q626	E-3	Q646	E-9	Q666	D-3		
D614	C-7	D635	E-10	D659	J-3			Q2048	B-13	Q607	D-2	Q627	D-3	Q647	D-9	Q667	D-1		
D615	D-7	D636	D-9	D660	J-3			Q205	B-14	Q608	C-2	Q628	D-3	Q648	D-9	Q668	B-7		
D616	H-5	D637	G-1	D661	J-4			Q206	C-14	Q609	D-2	Q629	C-3	Q649	D-9	Q670	C-2		
D617	C-9	D638	D-3	D662	J-2			Q301	C-12	Q610	C-2	Q630	D-3	Q650	D-8	Q671	C-3		





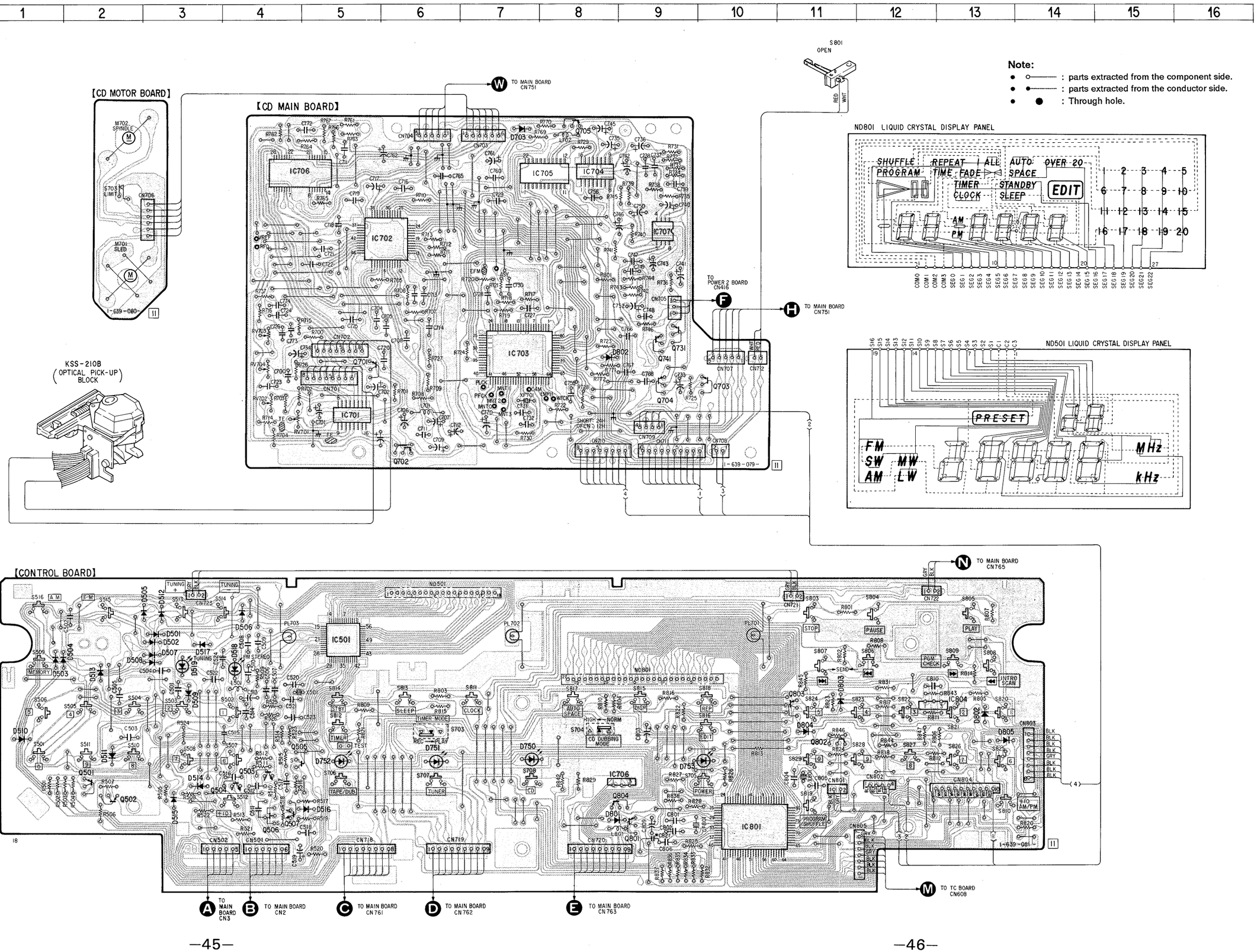
Note:

- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.

CD BLOCK

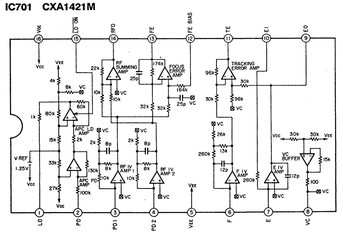
• Semiconductor Location

Ref. No.	Location
D501	H-3
D502	H-3
D503	I-1
D504	I-2
D505	H-3
D506	H-4
D507	I-3
D508	I-3
D509	I-3
D510	J-1
D511	J-2
D512	H-3
D513	I-2
D514	J-3
D515	K-3
D516	K-5
D517	I-3
D518	I-4
D519	I-3
D703	B-7
D750	J-7
D751	J-6
D752	J-5
D753	J-10
D801	K-8
D802 (CONTROL)	I-13
D802 (CD MAIN)	E-8
D803	I-11
D804	J-11
D805	J-13
IC501	H-5
IC701	F-5
IC702	C-6
IC703	E-7
IC704	B-8
IC705	B-8
IC706 (CONTROL)	J-9
IC706 (CD MAIN)	B-4
IC707	C-9
IC801	K-10
IC804	I-13
Q501	J-2
Q502	J-2
Q503	J-4
Q504	J-4
Q505	J-4
Q506	K-4
Q507	K-4
Q701	E-5
Q702	F-6
Q703	E-10
Q704	E-9
Q705	B-8
Q801	K-9
Q802	J-11
Q803	I-11
Q804	K-9

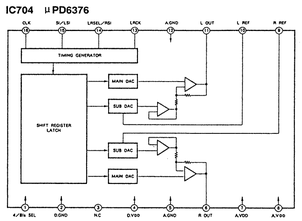


• IC Block Diagrams

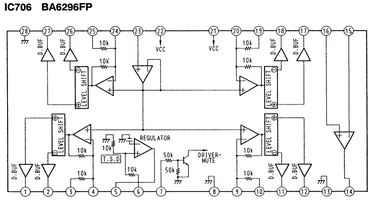
IC701 CXA1421M



IC704 µPD6376

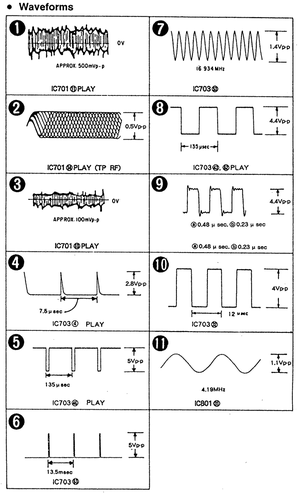


IC706 BA6296FP



5-7. CD CONTROL SCHEMATIC DIAGRAM

• Waveforms

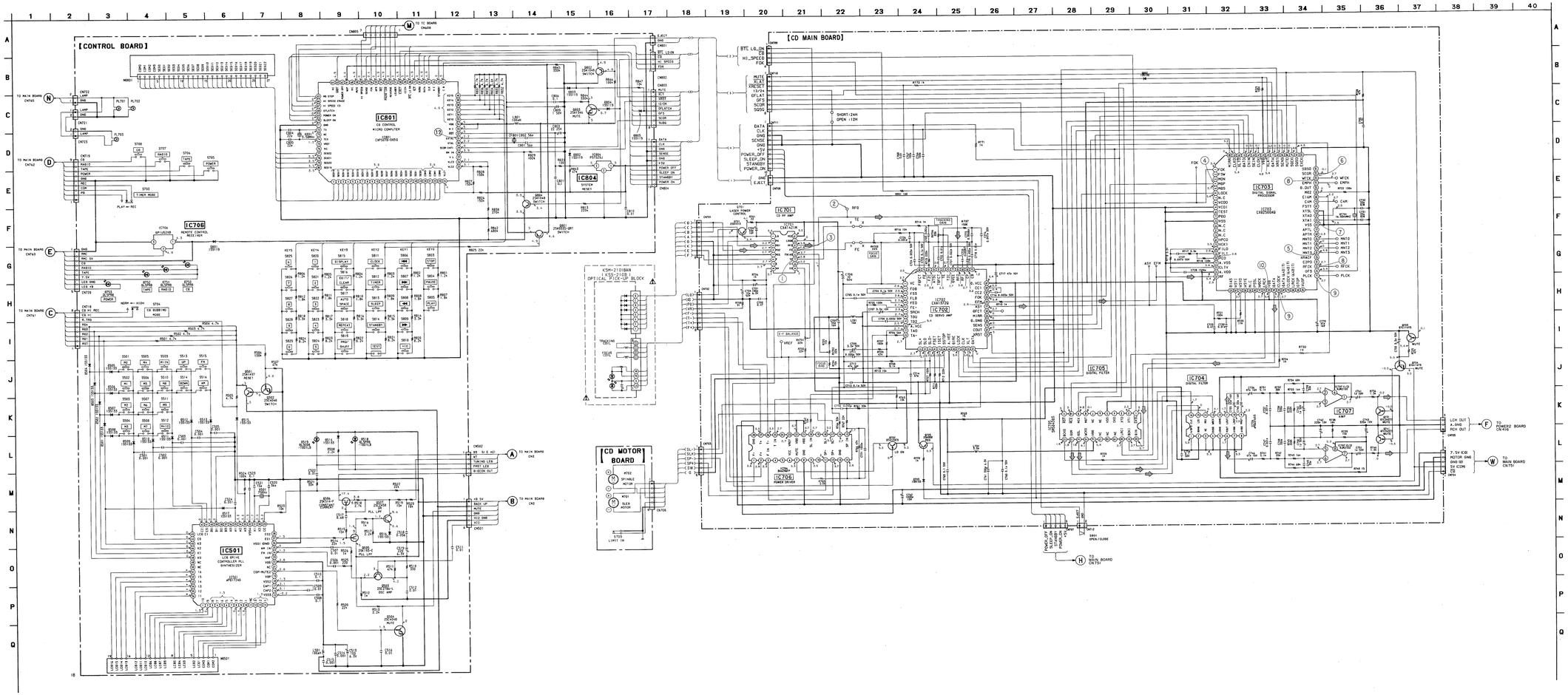


Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- % : indicates tolerance.
- : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

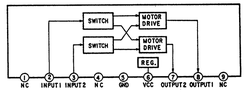
- : B + Line.
- : adjustment for repair.
- Power voltage is dc 12 V and fed with regurated dc power supply from external BATTERY TERMINAL.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM or CD
  ✻ : Impossible to measure the voltage at the marked points.
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD



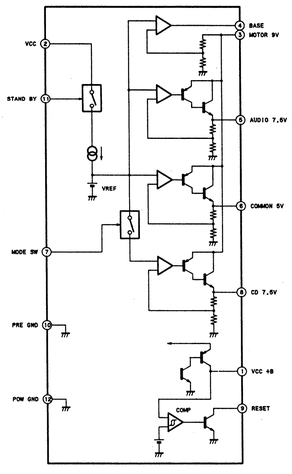
5-8. POWER BLOCK SCHEMATIC DIAGRAM

• IC Block Diagrams

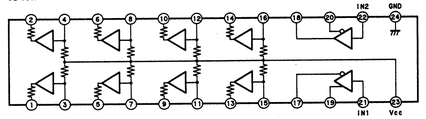
IC401 BA6208



IC404 BA3924



IC402 BA3823LS

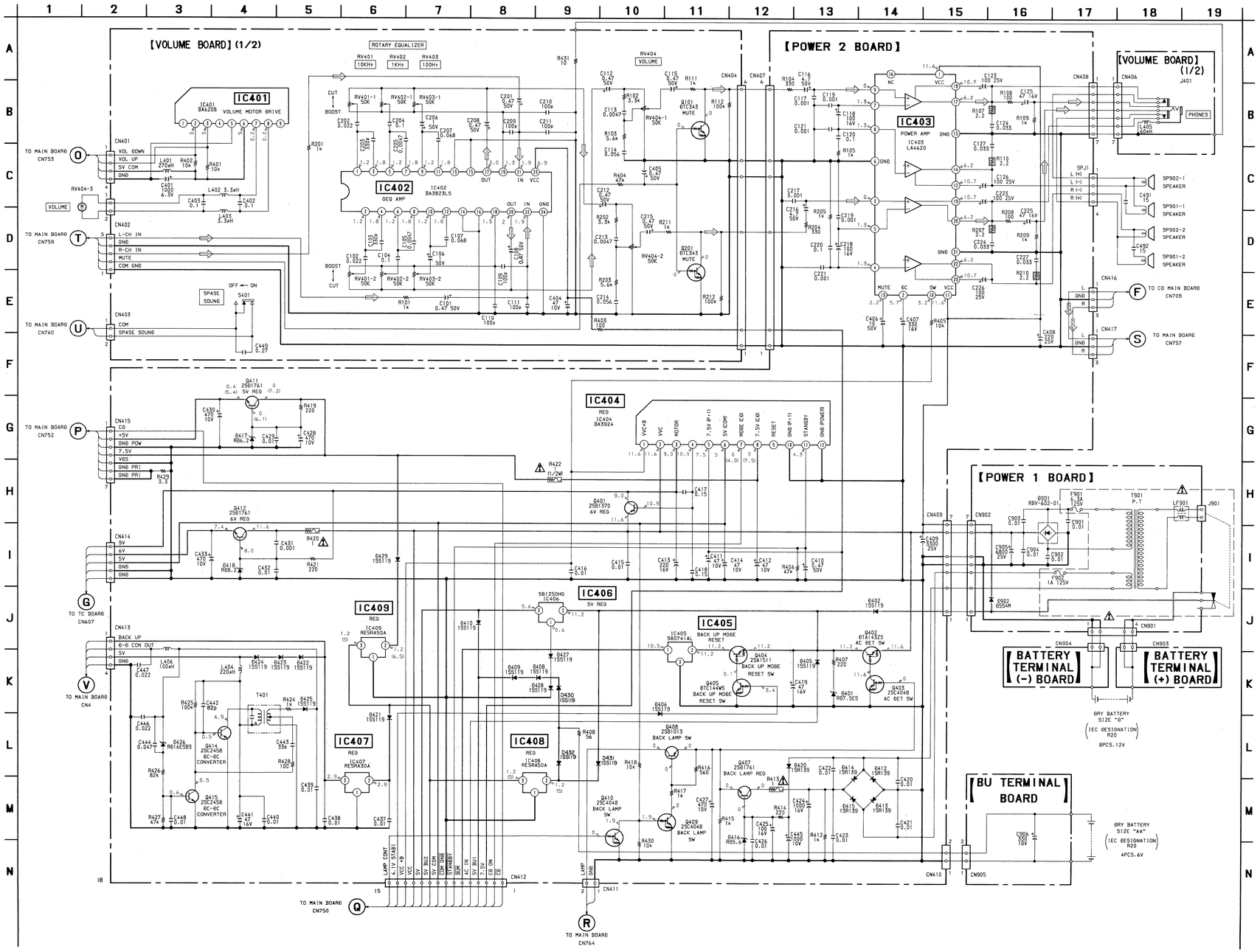


Note:

- All capacitors are in μF unless otherwise noted. pF: μμF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- % : indicates tolerance.
- : nonflammable resistor.
- : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

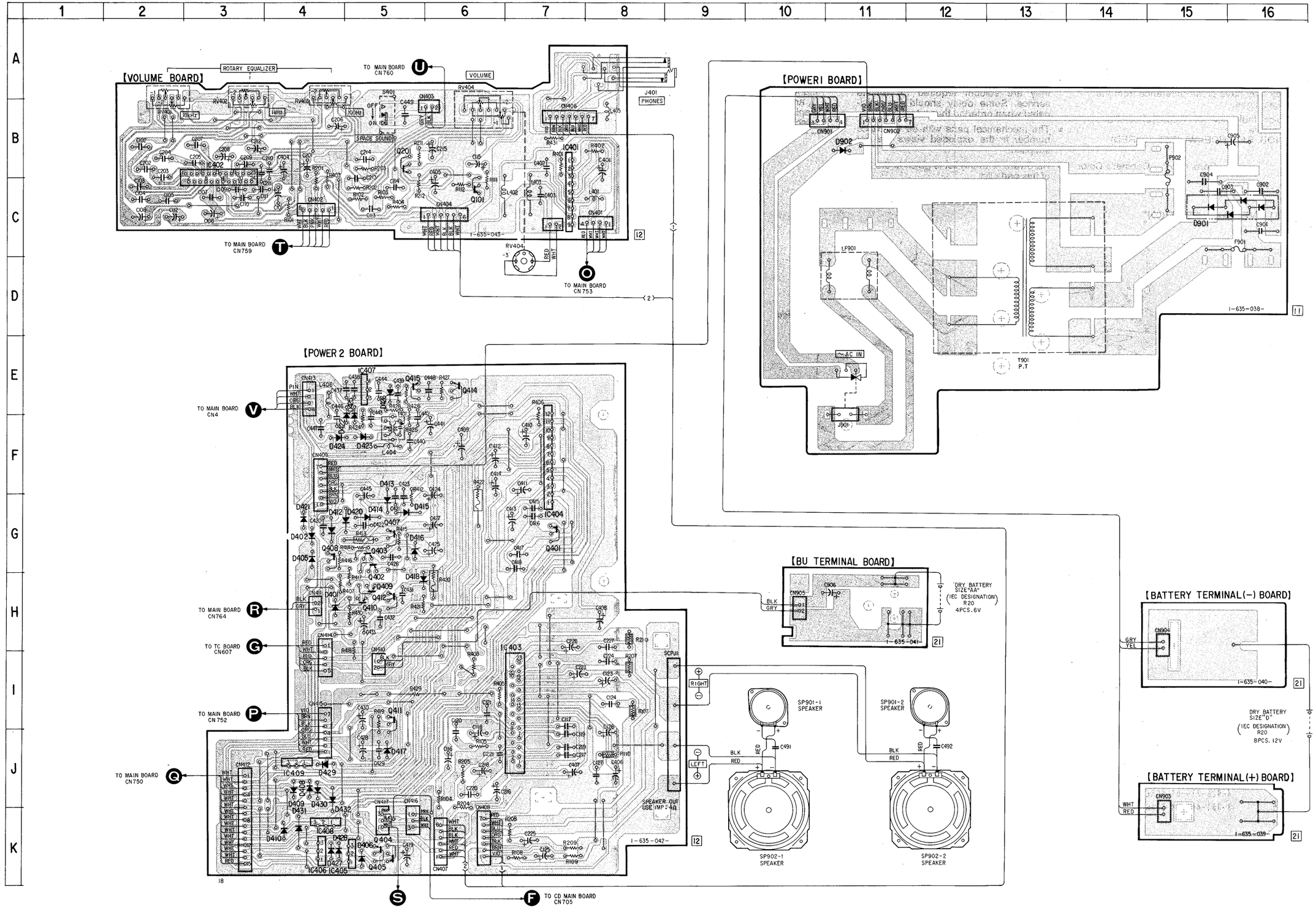
- : B + Line.
- Power voltage is dc 12 V and fed with regurated dc power supply from external BATTERY TERMINAL.
- Voltages is dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : CD
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM ⇨ : CD



POWER BLOCK

• Semiconductor Location

Ref. No.	Location
D401	H-4
D402	G-4
D405	G-4
D406	K-5
D408	J-4
D409	J-4
D410	K-4
D412	G-4
D413	G-5
D414	G-5
D415	G-5
D416	G-6
D417	J-5
D418	H-5
D420	G-5
D421	G-4
D422	F-5
D423	F-5
D424	F-4
D425	F-5
D426	E-5
D427	K-4
D428	K-4
D429	J-4
D430	J-4
D431	K-4
D432	J-4
D901	C-16
D902	B-11
IC401	C-7
IC402	B-3
IC403	I-7
IC404	F-7
IC405	K-5
IC406	K-4
IC407	E-5
IC408	K-4
IC409	J-4
Q101	C-6
Q201	B-5
Q401	G-7
Q402	G-5
Q403	G-5
Q404	K-5
Q405	K-5
Q407	G-5
Q408	G-4
Q409	H-5
Q410	H-5
Q411	I-5
Q412	H-5
Q414	E-6
Q415	E-5



Note:

• ○——— : parts extracted from the component side.

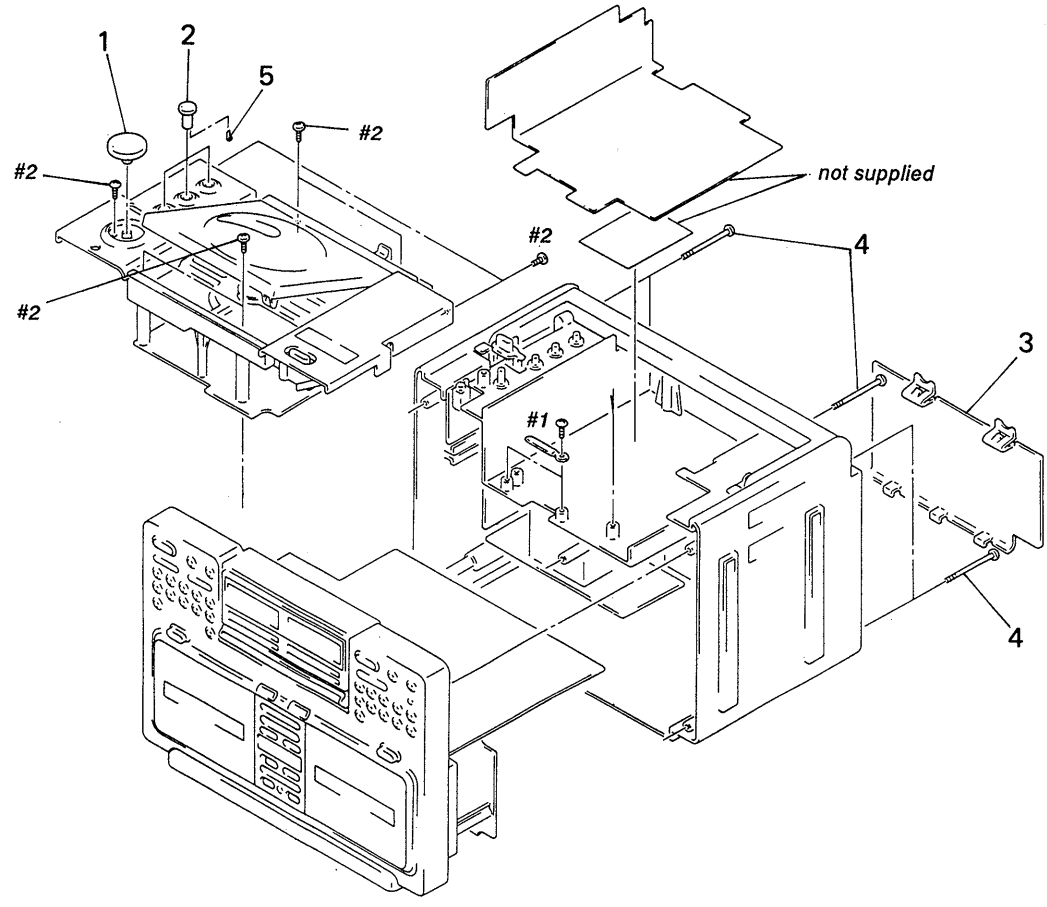
SECTION 6
EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

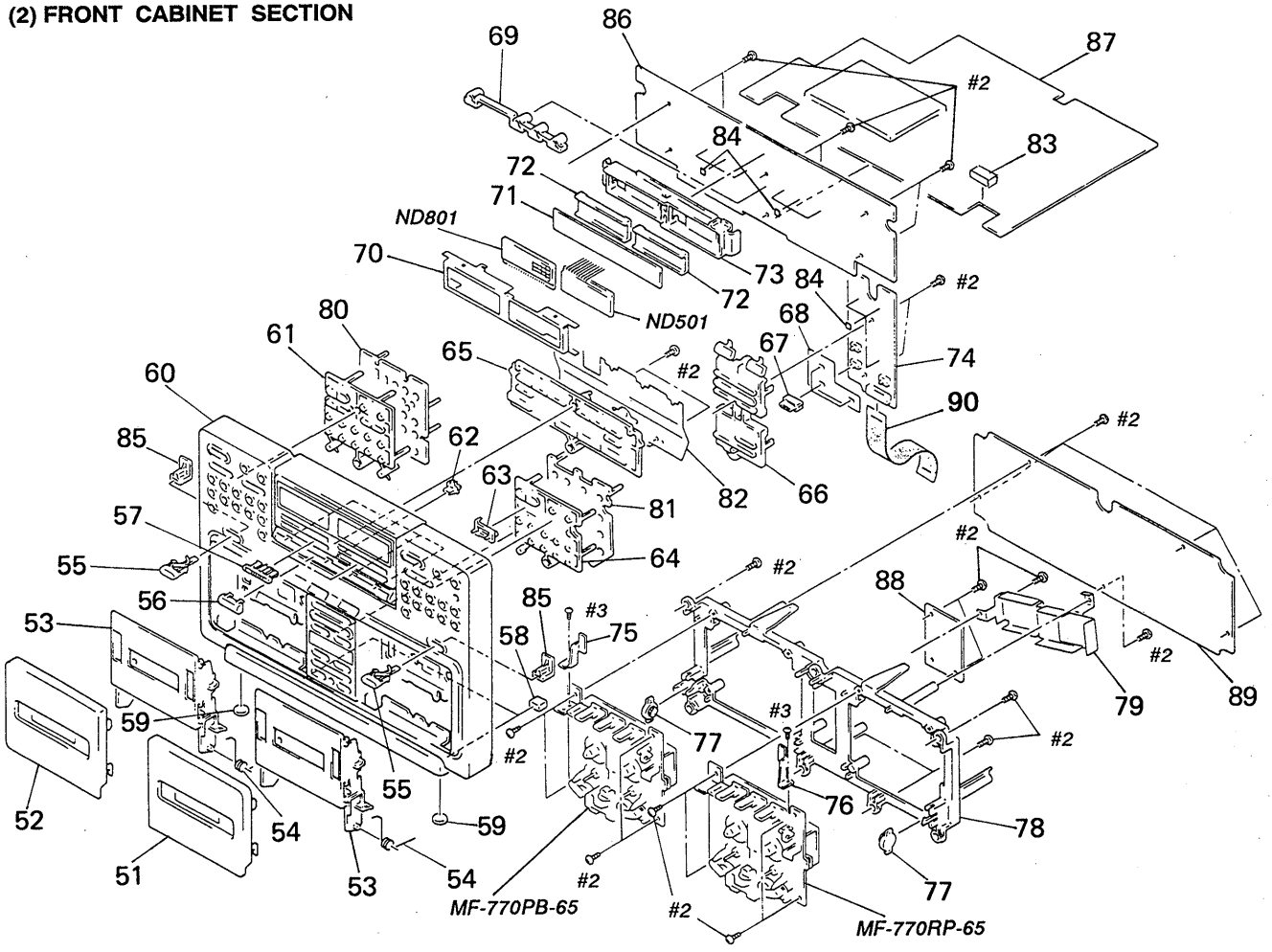
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

(1) OVER ALL SECTION



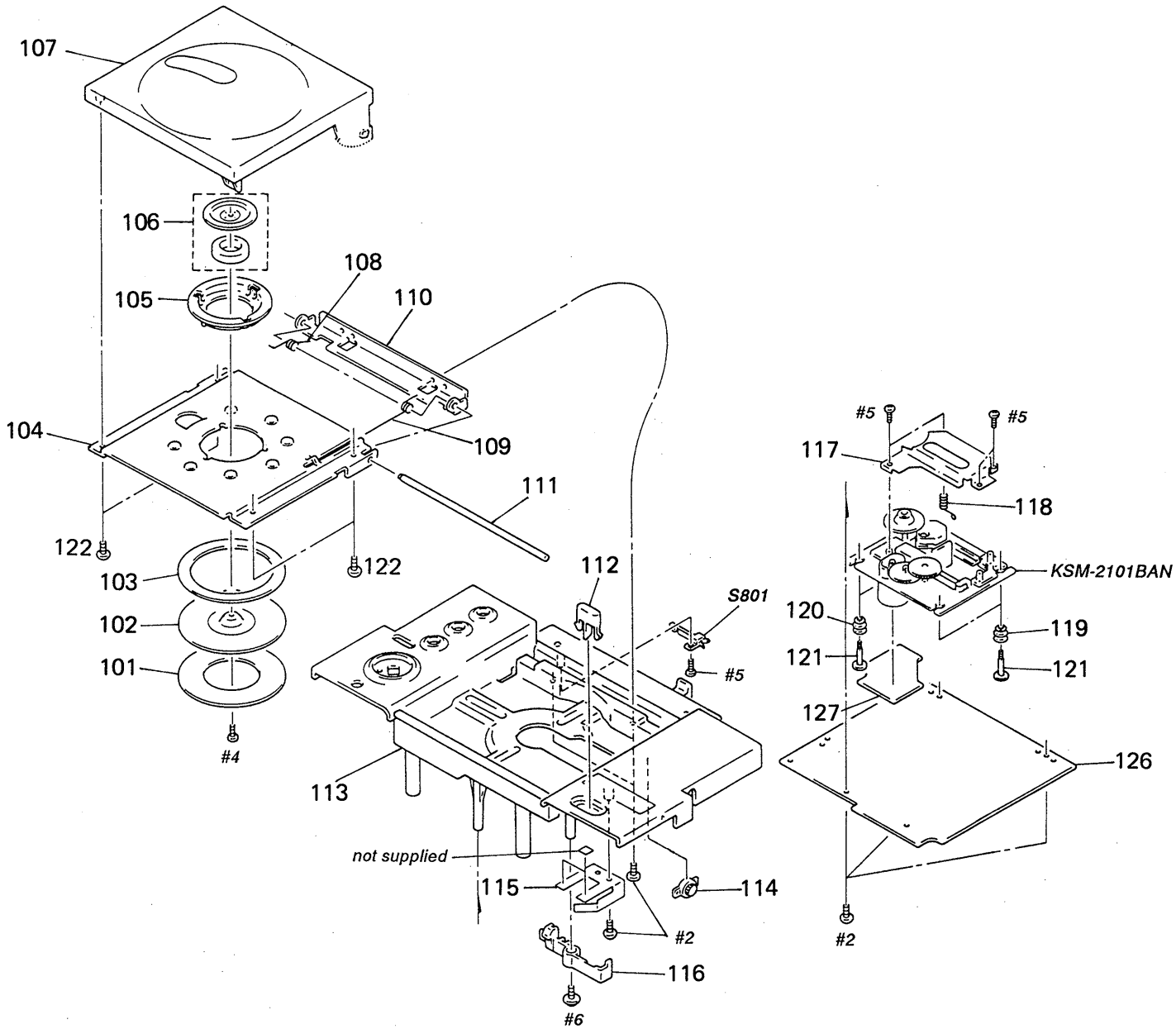
Ref. No.	Part No.	Description	Remark
1	4-937-646-01	KNOB (VOL)	
2	4-937-647-11	KNOB (GEQ)	
3	4-937-653-01	LID, BATTERY CASE	
4	4-926-715-01	SCREW (3X62), TAPPING	
5	3-381-441-XX	SPACER, 3X10	

(2) FRONT CABINET SECTION



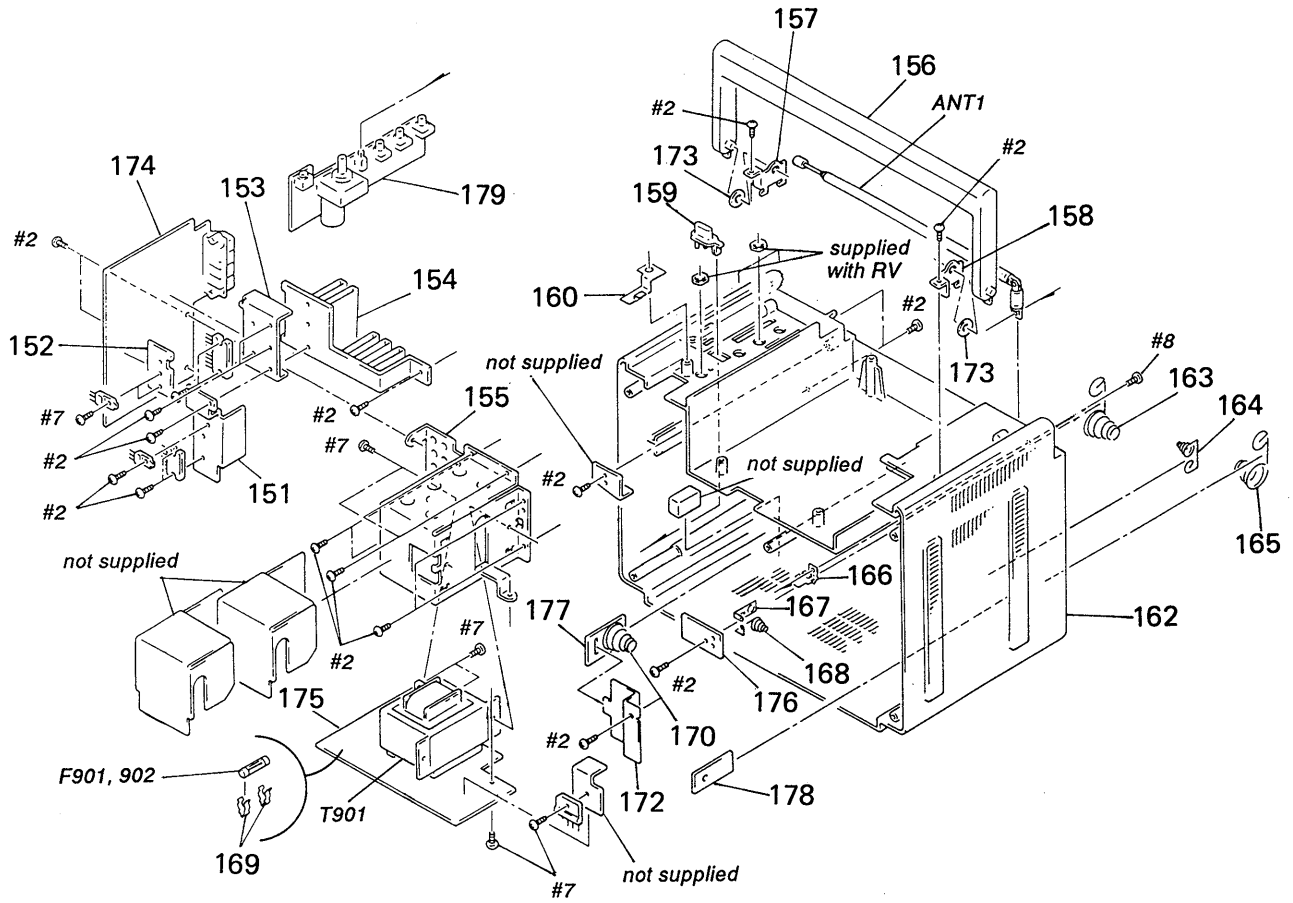
Ref. No.	Part No.	Description	Remark
51	X-3363-120-1	LID (B) ASSY, CASSETTE	
52	X-3363-121-1	LID (A) ASSY, CASSETTE	
53	4-937-650-01	HOLDER, CASSETTE	
54	4-937-602-01	SPRING (CH)	
55	4-937-610-11	KNOB (EJECT/MD)	
56	4-937-611-01	WINDOW (REMOTE. S)	
57	4-937-607-01	KNOB (MODE)	
58	9-911-815-01	CUSHION	
59	4-930-231-01	FOOT	
60	X-3363-127-1	CABINET (FRONT) SUB ASSY	
61	4-937-638-11	BUTTON BLOCK (CD)	
62	4-937-608-01	WINDOW (FU), LED	
63	4-937-632-01	WINDOW (TUN), LED	
64	4-937-640-31	BUTTON BLOCK (TUN)	
65	4-937-655-11	BUTTON BLOCK (FUNC)	
66	4-937-639-11	BUTTON BLOCK (SC)	
67	4-937-609-01	KNOB (PM)	
68	* 4-937-669-11	PLATE (DI), ORNAMENTAL	
69	* 4-937-697-01	HOLDER, LED	
70	* 4-937-642-01	RETAINER, LCD	
71	* 4-937-615-01	SHEET (REFLECTOR)	
72	* 4-937-645-01	PLATE (LCD), LIGHT GUIDE	
73	* 4-937-641-01	HOLDER (NO. 2), LCD	
74	* A-3289-767-A	MD CONTROL BOARD, COMPLETE	
75	* 4-937-617-01	PLATE (EJECT) (A)	
76	* 4-937-618-01	PLATE (EJECT) (B)	
77	3-343-248-11	DAMPER (P), SMALL	
78	* 4-937-649-01	CHASSIS (MD)	
79	* 4-937-648-01	PLATE (M), SHIELD	
80	* 4-937-699-01	HOLDER (CD), BUTTON	
81	* 4-937-698-01	HOLDER (TUN), BUTTON	
82	* 4-937-694-01	RETAINER (FU), BUTTON BL	
83	9-911-840-XX	CUSHION (U)	
84	3-831-441-11	SPACER	
85	4-937-695-01	ADAPTOR, MD/EJECT	
86	* A-3275-044-A	CONTROL BOARD, COMPLETE	
87	* A-3261-164-A	MAIN BOARD, COMPLETE	
88	* A-3289-770-A	SUB, TC BOARD, COMPLETE	
89	* A-3289-769-A	TC BOARD, COMPLETE	
90	* 1-575-950-11	CORD, TARALLBL (19 CORE) (FFC)	
ND501	1-809-027-11	DISPLAY PANEL, LIQUID CRYSTAL	
ND801	1-809-019-11	DISPLAY PANEL, LIQUID CRYSTAL	

(3) CD BLOCK SECTION



Ref. No.	Part No.	Description	Remark
101	4-919-972-01	WASHER	
102	4-919-973-01	PLATE (C), CHUCK	
103	4-923-370-01	WASHER (CD)	
104	4-937-654-01	PANEL (CD), INNER	
105	* 3-350-659-01	BRACKET, CHUCK PLATE	
106	X-4918-291-1	MAGNET (B) ASSY	
107	X-3363-119-1	LID SUB ASSY, CD	
108	4-937-604-01	SPRING (S), CD	
109	4-937-603-01	SPRING (L), CD	
110	* 4-937-637-01	PLATE (CD), FULCRUM	
111	* 4-937-621-01	SHAFT (CD), FULCRUM	
112	4-937-605-11	KNOB (CD EJECT)	
113	X-3363-125-1	PANEL SUB ASSY, TOP	
114	3-319-224-11	DAMPER, SMALL	
115	4-937-680-01	SPRING, LEAF, CD EJECT	
116	4-937-606-01	CLAW (CD), EJECT	
117	* 4-928-936-01	COVER, CD	
118	4-931-358-01	SPRING	
119	4-922-858-01	DAMPER	
120	4-922-858-11	DAMPER	
121	4-931-373-01	SCREW, CD FITTING	
122	3-325-685-21	SCREW, TAPPING	
126	* A-3275-045-A	CD MAIN BOARD, COMPLETE	
127	* 1-639-080-11	CD MOTOR BOARD	
S801	1-571-283-11	SWITCH, LEAF (OPEN/CLOSE)	

(4) REAR CABINET SECTION

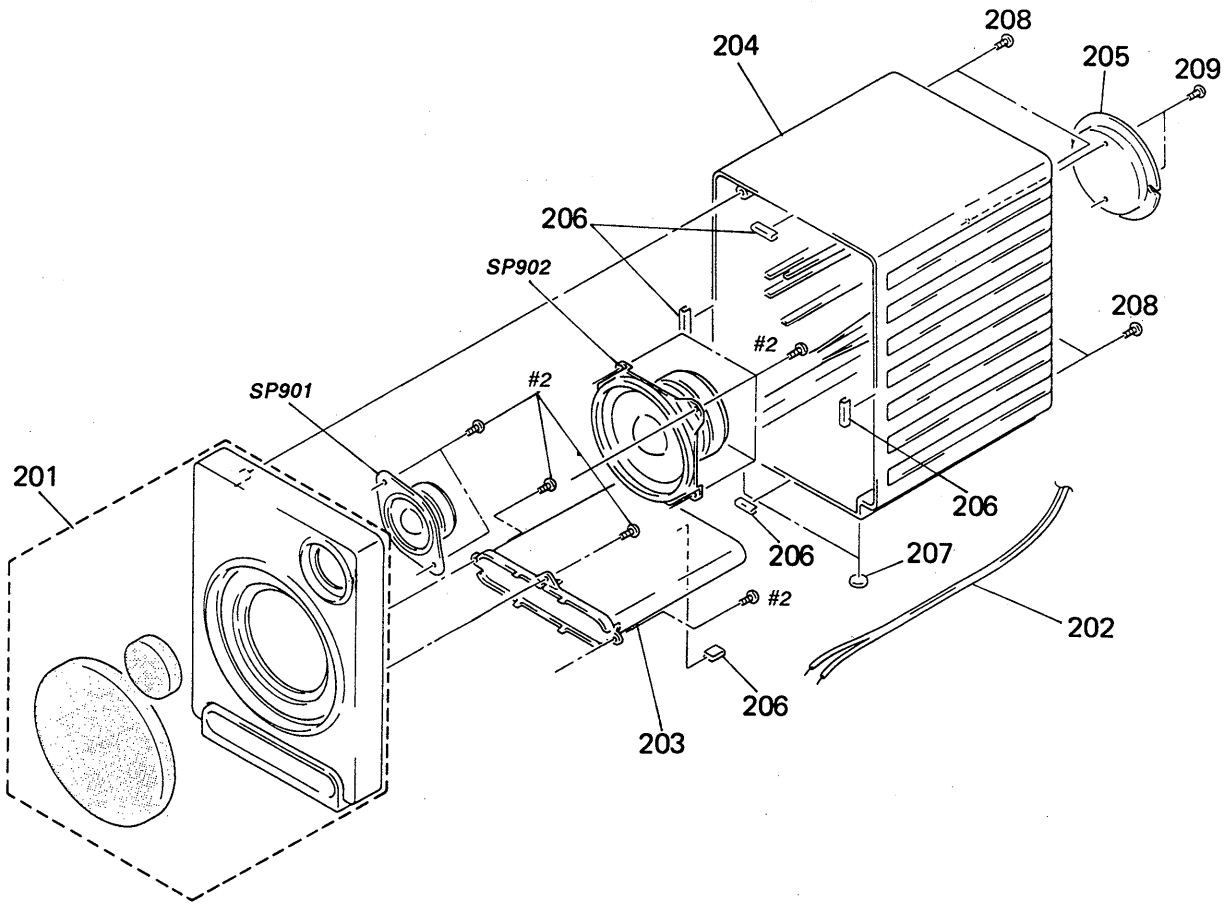


Ref. No.	Part No.	Description	Remark
151	* 1-937-672-01	HEAT SINK (E)	
152	* 1-937-671-01	HEAT SINK (D)	
153	* 1-937-673-01	HEAT SINK (F)	
154	* X-4937-610-1	HEAT SINK (P) ASSY	
155	* 4-937-657-01	BRACKET, TRANSFORMER	
156	3-365-581-11	HANDLE	
157	* 4-937-619-01	BRACKET (L), HANDLE	
158	* 4-937-620-01	BRACKET (R), HANDLE	
159	4-937-623-11	KNOB (SPACE SOUND)	
160	* 4-937-689-01	RETAINER (H/P)	
162	4-937-659-61	CABINET (REAR)	
163	4-937-624-01	SPRING (C1), BATTERY COIL	
164	4-937-626-01	SPRING (C), BU COIL	
165	4-937-631-01	SPRING (C2), BATTERY COIL	
166	* 4-937-629-01	TERMINAL, ANT	
167	3-362-829-01	TERMINAL (+), BU	

Ref. No.	Part No.	Description	Remark
168	4-937-627-01	SPRING (-), BU COIL	
169	* 1-533-189-11	HOLDER, FUSE	
170	4-937-625-01	SPRING (-), BATTERY COIL	
171	3-364-189-01	CUSHION (T)	
172	4-937-682-11	PLATE (BATT), BLIND	
173	3-366-704-01	WASHER (K)	
174	* A-3289-772-A	POWER 2 BOARD, COMPLETE	
175	* 1-635-038-11	POWER 1 BOARD	
176	* 1-635-041-21	BU TERMINAL BOARD	
177	* 1-635-040-21	BATTERY TERMINAL (-) BOARD	
178	* 1-635-039-21	BATTERY TERMINAL (+) BOARD	
179	* A-3289-773-A	VOLUME BOARD, COMPLETE	
ANT1	1-501-480-11	ANTENNA, TELESCOPIC	
F901	⚠ 1-532-748-11	FUSE, GLASS TUBE (6.3A 125V)	
F902	⚠ 1-532-740-11	FUSE, GLASS TUBE (1A 125V)	
T901	⚠ 1-450-131-11	TRANSFORMER, POWER	

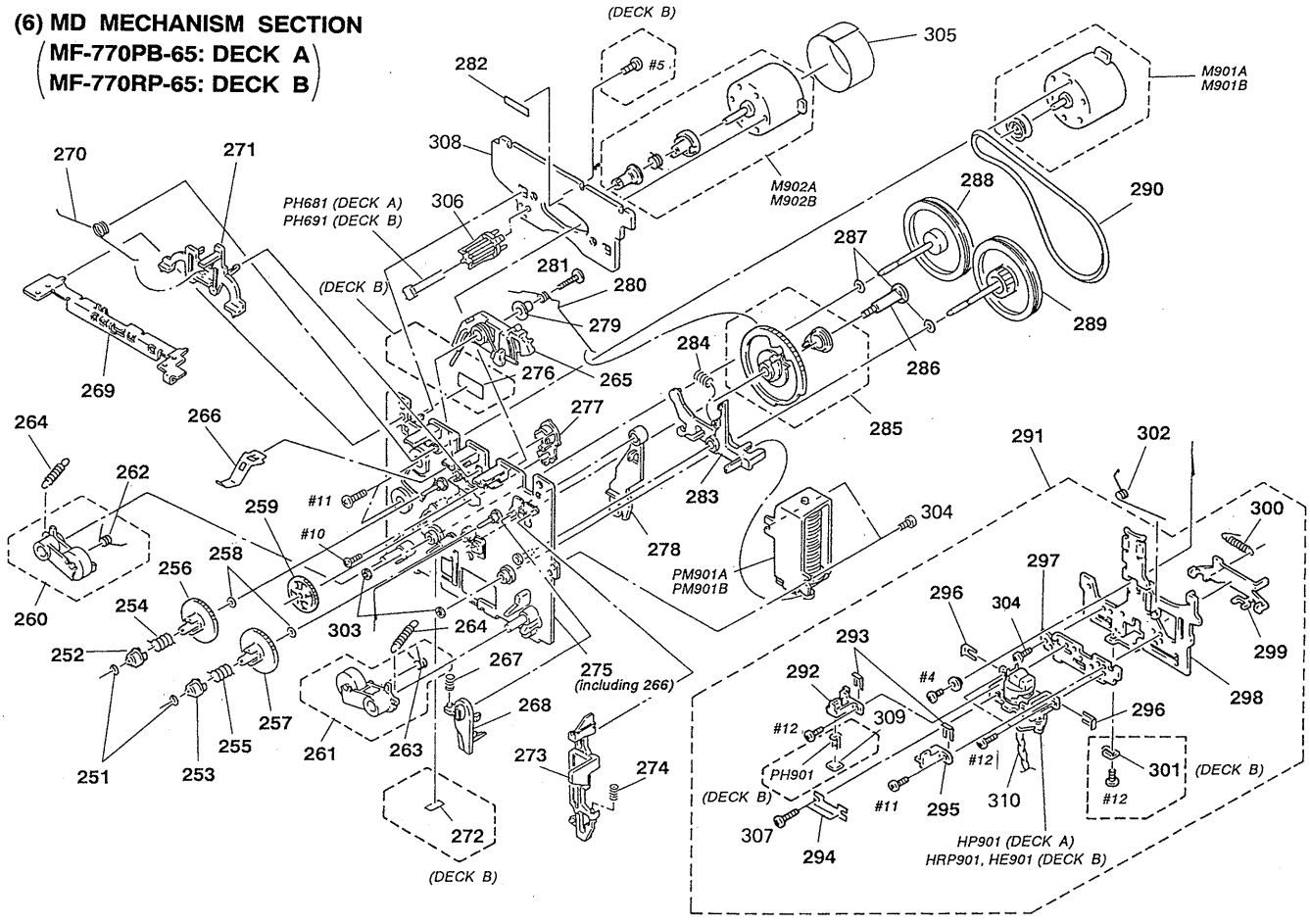
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

(5) SP BOX SECTION



Ref. No.	Part No.	Description	Remark
201	X-3363-122-1	SP (FRONT) (R) SUB ASSY	
201	X-3363-123-1	SP (FRONT) (L) SUB ASSY	
202	1-556-650-00	CORD, CONNECTION (SPEAKER)	
203	4-937-644-01	DUCT	
204	4-937-661-01	BOX (REAR) (R), SP	
204	4-937-662-01	BOX (REAR) (L), SP	
205	4-937-630-01	REEL, SP	
206	3-831-441-XX	CUSHION, SPEAKER	
207	4-930-231-01	FOOT	
208	3-325-679-31	SCREW, TAPPING +BV 3X14	
209	3-325-679-71	SCREW, TAPPING +BV 3X12	
SP901	1-503-488-11	SPEAKER	
SP902	1-544-342-11	SPEAKER	

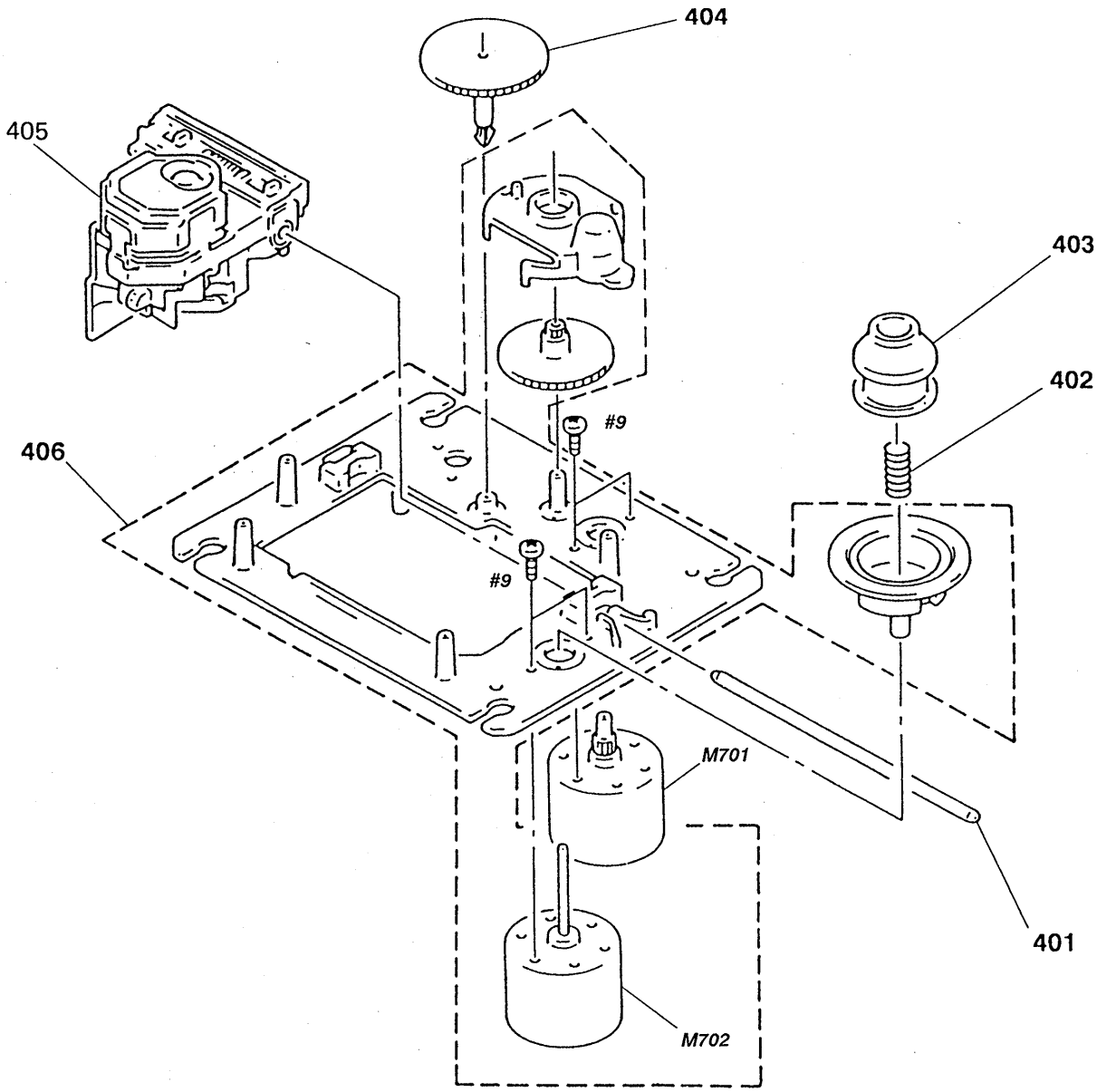
(6) MD MECHANISM SECTION
(MF-770PB-65: DECK A)
(MF-770RP-65: DECK B)



Ref. No.	Part No.	Description	Remark
251	3-578-223-21	WASHER, NYLON	
252	3-362-481-01	CLAW (S), REEL	
253	3-362-480-01	CLAW (T), REEL	
254	3-362-831-02	SPRING (RS), TORSION	
255	3-362-830-02	SPRING (RT), TORSION	
256	A-3130-037-A	GEAR (REEL) ASSY	
257	3-362-482-01	GEAR (REEL)	
258	3-701-437-51	WASHER	
259	3-362-483-01	GEAR (DRIVING A)	
260	X-3306-509-1	LEVER (R) ASSY, PC	
261	X-3306-508-1	LEVER (N) ASSY, PC	
262	3-360-316-01	SPRING (R), TORSION	
263	3-360-315-01	SPRING (N), TORSION	
264	4-602-490-01	SPRIG, TENSION	
265	X-3306-511-1	LINK (LIMITER) ASSY	
266	3-360-328-01	PLATE, CASSETTE	
267	3-360-336-01	SPRIG, COMPRESSION	
268	3-360-324-01	LEVER, AMS	
269	3-360-312-01	PLATE, SW RETURN	
270	3-360-310-01	SPRING (BRAKE), TORSION	
271	3-360-348-01	BRAKE	
272	* 3-360-334-03	PAPER (B), REFLECTION··· (DECK B)	
273	3-360-307-01	SLIDER (EJECT)	
274	3-363-790-01	SPRIG, COMPRESSION	
275	X-3306-546-1	SHASSIS (M) ASSY	
276	3-381-441-XX	SPACER··· (DECK B)	
277	3-306-599-01	ARM, DRIVING	
278	3-360-306-01	LEVER, N	
279	3-363-146-01	SLEEVE, SPRING RETAINER	
280	3-360-337-05	SPRING (CAM), TORSION	
281	3-344-728-01	SCREW (B1.4), TAPPING	
282	9-911-844-XX	CUSHION (RM)	
283	3-360-304-01	LEVER, PL	
284	3-344-751-01	SPRING, COMPRESSION	
285	X-3362-641-1	GEAR (CAM) ASSY	
286	3-364-608-01	SCREW (M2.6X11.6X3.5), STEP	
287	3-701-437-11	WASHER	
288	X-3306-513-1	FLYWHEEL (R) ASSY	
289	X-3306-512-1	FLYWHEEL (N) ASSY	
290	3-360-327-01	BELT	

Ref. No.	Part No.	Description	Remark
291	A-3113-033-A	BASE SUB ASSY, HEAD··· (DECK B)	
	A-3113-035-A	BASE ASSY, HEAD····· (DECK A)	
292	3-319-287-01	GUIDE, TAPE	
293	4-932-603-01	SHIM (t=0.1)	
	4-932-603-11	SHIM (t=0.2)	
294	4-930-440-01	SPRING	
295	4-930-438-01	GUIDE, TAPE	
296	3-336-274-01	SHIM (t=0.1)	
	3-336-274-11	SHIM (t=0.2)	
	3-336-274-21	SHIM (t=0.3)	
297	3-362-786-11	PLATE, SPACE	
298	* X-3362-100-2	BASE ASSY, HEAD··· (DECK B)	
298	* X-3363-207-1	BASE ASSY, HEAD··· (DECK A)	
299	* X-3362-073-2	SLIDER (NR2) ASSY	
300	3-363-432-01	SPRING, TENSION	
301	* 3-363-812-11	CLUMPER, LEAD··· (DECK B)	
302	3-360-321-01	SPRING, TORSION	
303	3-343-358-12	RING, RETAINING	
304	3-363-433-02	SCREW	
305	* 3-162-496-01	PLATE, SHIELD (MOTOR)	
306	3-360-345-01	HOLDER (PHOTO)	
307	3-344-788-01	SCREW, AZIMUTH ADJUSTMENT	
308	* 1-635-162-11	RELAR B BOARD··· (DECK B)	
	* 1-635-163-11	RELAR A BOARD··· (DECK A)	
309	* 1-635-577-11	PC BOARD, READER DETECTION··· (DECK B)	
310	* A-3249-575-A	CONNECTOR ASSY, 8P··· (DECK B)	
	* A-3249-577-A	CONNECTOR ASSY, 5P··· (DECK A)	
HE901 HRP901	A-3113-034-A	HEAD ASSY, ROTARY··· (DECK B)	
HP901	A-3113-036-A	PLATE ASSY, HD··· (DECK A)	
M901A	A-3133-405-A	MOTOR ASSY, CAPSTAN··· (DECK A)	
M901B	A-3133-405-A	MOTOR ASSY, CAPSTAN··· (DECK B)	
M902A	A-3208-406-A	MOTOR ASSY, REEL··· (DECK A)	
M902B	A-3208-406-A	MOTOR ASSY, REEL··· (DECK B)	
PH681	8-719-939-11	PHOTOINTERRUPTER GP-2S09-B··· (DECK A)	
PH691	8-719-939-11	PHOTOINTERRUPTER GP-2S09-B··· (DECK B)	
PH901	8-719-939-11	PHOTOINTERRUPTER GP-2S09-B··· (DECK B)	
PM901A	1-454-533-11	SOLENOID, PLUNGER··· (DECK A)	
PM901B	1-454-533-11	SOLENOID, PLUNGER··· (DECK B)	

(7) OPTICAL PICK-UP SECTION (KSM-2101BAN)



Ref. No.	Part No.	Description	Remark
401	4-917-565-01	SHAFT, SLED	
402	2-625-191-01	SPRING, COMPRESSION	
403	2-625-186-01	RING (C), CENTER	
404	2-625-188-02	GEAR (A)	
405	⚠ 8-848-137-11	OPTICL PICKUP KSS-210B	
406	X-2625-133-2	CHASSIS ASSY, TT (M702, SPINDLE)	
M701	X-2625-132-1	GEAR ASSY, MOTOR (SLED)	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

SECTION 7
ELECTRICAL PARTS LIST

BU BATTERY | BATTERY TERMINAL | CD MAIN

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When including parts by reference number, please include the board name.

Ref. No.	Part No.	Description	Remark
	* 1-635-041-21	BU BATTERY BOARD	
		**********	
		< CAPACITOR >	
C906	1-124-604-00	ELECT 330uF 20% 10V	
		< CONNECTOR >	
CN905	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
		**********	
	* 1-635-039-21	BATTERY TERMINAL (+) BOARD	
		**********	
		< CONNECTOR >	
CN903	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
		< JUMPER >	
JW902	* 1-535-303-00	WIRE, JUMPER	
JW903	* 1-535-303-00	WIRE, JUMPER	
		**********	
	* 1-635-040-21	BATTERY TERMINAL (-) BOARD	
		**********	
	4-937-625-01	SPRING (-), BATTERY COIL	
		< CONNECTOR >	
CN904	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
		**********	

Ref. No.	Part No.	Description			Remark
	* A-3275-045-A	CD MAIN BOARD, COMPLETE			
		**********			
	* 1-535-303-00	WIRE, JUMPER			
		< CAPACITOR >			
C700	1-136-173-00	FILM	0.47uF	5%	50V
C701	1-124-443-00	ELECT	100uF	20%	10V
C702	1-124-034-51	ELECT	33uF	20%	16V
C703	1-124-034-51	ELECT	33uF	20%	16V
C704	1-136-165-00	FILM	0.1uF	5%	50V
C705	1-136-165-00	FILM	0.1uF	5%	50V
C706	1-124-907-11	ELECT	10uF	20%	50V
C707	1-131-368-00	TANTALUM	3.3uF	10%	16V
C708	1-130-489-00	MYLAR	0.033uF	5%	50V
C709	1-123-382-00	ELECT	3.3uF	20%	100V
C711	1-130-493-00	MYLAR	0.068uF	5%	50V
C712	1-124-477-11	ELECT	47uF	20%	25V
C713	1-162-851-11	CERAMIC	0.1uF		16V
C714	1-162-215-31	CERAMIC	47PF	5%	50V
C716	1-130-489-00	MYLAR	0.033uF	5%	50V
C717	1-124-477-11	ELECT	47uF	20%	25V
C718	1-161-379-00	CERAMIC	0.01uF	20%	25V
C719	1-130-489-00	MYLAR	0.033uF	5%	50V
C720	1-130-479-00	MYLAR	0.0047uF	5%	50V
C721	1-161-494-00	CERAMIC	0.022uF		25V
C722	1-161-379-00	CERAMIC	0.01uF	20%	25V
C723	1-162-294-31	CERAMIC	0.001uF	10%	50V
C724	1-130-489-00	MYLAR	0.033uF	5%	50V
C725	1-136-165-00	FILM	0.1uF	5%	50V
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V
C727	1-130-491-00	MYLAR	0.047uF	5%	50V
C728	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C729	1-136-173-00	FILM	0.47uF	5%	50V

Ref. No.	Part No.	Description			Remark
C730	1-161-379-00	CERAMIC	0.01uF	20%	25V
C731	1-162-206-31	CERAMIC	20PF	5%	50V
C732	1-162-206-31	CERAMIC	20PF	5%	50V
C733	1-123-382-00	ELECT	3.3uF	20%	100V
C734	1-124-907-11	ELECT	10uF	20%	50V
C735	1-124-034-51	ELECT	33uF	20%	16V
C736	1-124-477-11	ELECT	47uF	20%	25V
C737	1-130-471-00	MYLAR	0.001uF	5%	50V
C738	1-162-288-31	CERAMIC	330PF	10%	50V
C739	1-162-211-31	CERAMIC	33PF	5%	50V
C740	1-124-903-11	ELECT	1uF	20%	50V
C741	1-124-903-11	ELECT	1uF	20%	50V
C742	1-126-176-11	ELECT	220uF	20%	10V
C743	1-124-604-00	ELECT	330uF	20%	10V
C745	1-124-034-51	ELECT	33uF	20%	16V
C746	1-124-477-11	ELECT	47uF	20%	25V
C747	1-130-471-00	MYLAR	0.001uF	5%	50V
C748	1-162-288-31	CERAMIC	330PF	10%	50V
C749	1-162-211-31	CERAMIC	33PF	5%	50V
C750	1-124-903-11	ELECT	1uF	20%	50V
C751	1-124-903-11	ELECT	1uF	20%	50V
C755	1-161-379-00	CERAMIC	0.01uF	20%	25V
C756	1-162-851-11	CERAMIC	0.1uF		16V
C760	1-162-851-11	CERAMIC	0.1uF		16V
C761	1-124-442-00	ELECT	330uF	20%	6.3V
C762	1-124-473-11	ELECT	1000uF	20%	10V
C765	1-162-851-11	CERAMIC	0.1uF		16V
C766	1-162-282-31	CERAMIC	100PF	10%	50V
C767	1-162-282-31	CERAMIC	100PF	10%	50V
C768	1-161-379-00	CERAMIC	0.01uF	20%	25V
C770	1-124-477-11	ELECT	47uF	20%	25V
C771	1-162-294-31	CERAMIC	0.001uF	10%	50V
C772	1-130-484-00	MYLAR	0.012uF	5%	50V
C773	1-161-329-00	CERAMIC	0.0068uF	30%	16V
C774	1-130-491-00	MYLAR	0.047uF	5%	50V

< CONNECTOR >

CN701	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE)	8P
CN702	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE)	8P
CN703	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE)	6P
CN704	* 1-564-721-11	PIN, CONNECTOR (SMALL TYPE)	5P
CN705	* 1-564-719-11	PIN, CONNECTOR (SMALL TYPE)	3P
CN707	* 1-564-721-21	PIN, CONNECTOR (SMALL TYPE)	5P
CN708	* 1-564-718-11	PIN, CONNECTOR (SMALL TYPE)	2P
CN709	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE)	4P
CN710	* 1-564-724-11	PIN, CONNECTOR (SMALL TYPE)	8P
CN711	* 1-564-726-11	PIN, CONNECTOR (SMALL TYPE)	10P
CN712	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE)	2P

Ref. No.	Part No.	Description		Remark
		< DIODE >		
D703	8-719-911-19	DIODE	1SS119	
D802	8-719-911-19	DIODE	1SS119	
		< IC >		
IC701	8-752-039-03	IC	CXA1421M	
IC702	8-752-050-82	IC	CXA1372Q	
IC703	8-752-337-26	IC	CXD2500AQ	
IC704	8-759-148-30	IC	uPD6376GS	
IC705	8-759-503-98	IC	SM5840DS	
IC706	8-759-518-59	IC	BA6296FP	
IC707	8-759-710-55	IC	NJM2100M	
		< COIL >		
L701	1-410-509-11	INDUCTOR	10uH	
L702	1-410-322-11	INDUCTOR	3.3uH	
		< TRANSISTOR >		
Q701	8-729-801-84	TRANSISTOR	2SB1013-4	
Q702	8-729-900-63	TRANSISTOR	DTA124ES	
Q703	8-729-904-39	TRANSISTOR	DTC114TS	
Q704	8-729-902-80	TRANSISTOR	DTA114YS	
Q705	8-729-202-56	TRANSISTOR	2SA950-Y	
Q731	8-729-905-50	TRANSISTOR	DTC343TS	
Q741	8-729-905-50	TRANSISTOR	DTC343TS	

< RESISTOR >

R700	1-247-806-11	CARBON	91	5%	1/4W
R701	1-249-397-11	CARBON	22	5%	1/4W
R702	1-249-433-11	CARBON	22K	5%	1/4W
R703	1-249-431-11	CARBON	15K	5%	1/4W
R704	1-249-431-11	CARBON	15K	5%	1/4W
R705	1-249-441-11	CARBON	100K	5%	1/4W
R706	1-249-438-11	CARBON	56K	5%	1/4W
R707	1-247-885-00	CARBON	180K	5%	1/4W
R708	1-247-854-11	CARBON	9.1K	5%	1/4W
R709	1-249-437-11	CARBON	47K	5%	1/4W
R710	1-249-417-11	CARBON	1K	5%	1/4W
R711	1-247-894-11	CARBON	430K	5%	1/4W
R712	1-247-887-00	CARBON	220K	5%	1/4W
R713	1-249-429-11	CARBON	10K	5%	1/4W
R714	1-249-417-11	CARBON	1K	5%	1/4W
R715	1-247-887-00	CARBON	220K	5%	1/4W
R716	1-249-429-11	CARBON	10K	5%	1/4W
R717	1-249-423-11	CARBON	3.3K	5%	1/4W
R718	1-247-881-00	CARBON	120K	5%	1/4W
R719	1-249-423-11	CARBON	3.3K	5%	1/4W
R720	1-247-856-00	CARBON	11K	5%	1/4W

CD MAIN | CD MOTOR | CONTROL

Ref. No.	Part No.	Description			Remark
R721	1-249-441-11	CARBON	100K	5% 1/4W	
R722	1-249-441-11	CARBON	100K	5% 1/4W	
R723	1-249-441-11	CARBON	100K	5% 1/4W	
R724	1-249-417-11	CARBON	1K	5% 1/4W	
R725	1-249-437-11	CARBON	47K	5% 1/4W	
R726	1-249-417-11	CARBON	1K	5% 1/4W	
R727	1-249-441-11	CARBON	100K	5% 1/4W	
R728	1-249-437-11	CARBON	47K	5% 1/4W	
R729	1-249-417-11	CARBON	1K	5% 1/4W	
R730	1-249-417-11	CARBON	1K	5% 1/4W	
R731	1-247-848-11	CARBON	5.1K	5% 1/4W	
R732	1-249-436-11	CARBON	39K	5% 1/4W	
R733	1-247-860-11	CARBON	16K	5% 1/4W	
R734	1-249-439-11	CARBON	68K	5% 1/4W	
R735	1-247-887-00	CARBON	220K	5% 1/4W	
R736	1-247-834-11	CARBON	1.3K	5% 1/4W	
R737	1-247-883-00	CARBON	150K	5% 1/4W	
R738	1-247-860-11	CARBON	16K	5% 1/4W	
R739	1-249-431-11	CARBON	15K	5% 1/4W	
R740	1-249-395-11	CARBON	15	5% 1/4W	
R741	1-247-848-11	CARBON	5.1K	5% 1/4W	
R742	1-249-436-11	CARBON	39K	5% 1/4W	
R743	1-247-860-11	CARBON	16K	5% 1/4W	
R744	1-249-439-11	CARBON	68K	5% 1/4W	
R745	1-247-887-00	CARBON	220K	5% 1/4W	
R746	1-247-834-11	CARBON	1.3K	5% 1/4W	
R761	1-249-435-11	CARBON	33K	5% 1/4W	
R762	1-249-429-11	CARBON	10K	5% 1/4W	
R763	1-249-429-11	CARBON	10K	5% 1/4W	
R764	1-249-435-11	CARBON	33K	5% 1/4W	
R765	1-247-838-00	CARBON	2K	5% 1/4W	
R766	1-249-437-11	CARBON	47K	5% 1/4W	
R767	1-249-433-11	CARBON	22K	5% 1/4W	
R769	1-249-395-11	CARBON	15	5% 1/4W	
R770	1-249-417-11	CARBON	1K	5% 1/4W	
R771	1-249-417-11	CARBON	1K	5% 1/4W	
R772	1-249-417-11	CARBON	1K	5% 1/4W	
R801	1-249-405-11	CARBON	100	5% 1/4W	

< VARIABLE RESISTOR >

RV701	1-241-040-21	RES, ADJ, CARBON 22K
RV702	1-241-040-21	RES, ADJ, CARBON 22K
RV703	1-241-040-21	RES, ADJ, CARBON 22K
RV704	1-241-040-21	RES, ADJ, CARBON 22K

< CRYSTAL >

XF701	1-567-908-11	VIBRATOR, CRYSTAL 16.9344MHz

****

Ref. No.	Part No.	Description	Remark
	* 1-639-080-11	CD MOTOR BOARD	
		**********	
		< CONNECTOR >	
CN706	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P	
		< MOTOR >	
M701	X-2625-132-1	GEAR ASSY, MOTOR (SLED)	
M702	X-2625-133-2	CHASSIS ASSY, TT (SPINDLE)	
		< SWITCH >	
S703	1-571-936-11	SWITCH, LEAF (LIMIT)	

****

	* A-3275-044-A	CONTROL BOARD, COMPLETE
		**********
	* 1-535-303-00	WIRE, JUMPER
	* 4-937-615-01	SHEET (REFLECTOR)
	* 4-937-641-01	HOLDER (NO.2), LCD
	* 4-937-642-01	RETAINER, LCD
	* 4-937-645-01	PLATE (LCD), LIGHT GUIDE
	* 4-937-697-01	HOLDER, LED

< CAPACITOR >

C501	1-162-294-31	CERAMIC	0.001uF	10% 50V
C502	1-162-294-31	CERAMIC	0.001uF	10% 50V
C503	1-162-294-31	CERAMIC	0.001uF	10% 50V
C504	1-162-294-31	CERAMIC	0.001uF	10% 50V
C505	1-162-294-31	CERAMIC	0.001uF	10% 50V
C506	1-162-294-31	CERAMIC	0.001uF	10% 50V
C507	1-162-306-11	CERAMIC	0.01uF	20% 16V
C508	1-164-159-11	CERAMIC	0.1uF	50V
C509	1-162-306-11	CERAMIC	0.01uF	20% 16V
C510	1-164-159-11	CERAMIC	0.1uF	50V
C511	1-162-306-11	CERAMIC	0.01uF	20% 16V
C512	1-162-306-11	CERAMIC	0.01uF	20% 16V
C513	1-126-177-11	ELECT	100uF	20% 10V
C514	1-162-294-31	CERAMIC	0.001uF	10% 50V
C515	1-162-294-31	CERAMIC	0.001uF	10% 50V
C516	1-162-306-11	CERAMIC	0.01uF	20% 16V
C517	1-136-175-00	FILM	0.68uF	5% 50V
C518	1-136-162-00	FILM	0.056uF	5% 50V
C519	1-126-176-11	ELECT	220uF	20% 10V
C520	1-102-964-00	CERAMIC	36PF	5% 50V
C521	1-162-203-31	CERAMIC	15PF	5% 50V
C522	1-162-306-11	CERAMIC	0.01uF	20% 16V

Ref. No.	Part No.	Description			Remark
C523	1-164-159-11	CERAMIC	0.1uF		50V
C524	1-162-294-31	CERAMIC	0.001uF	10%	50V
C801	1-101-884-00	CERAMIC	56PF	5%	50V
C802	1-101-884-00	CERAMIC	56PF	5%	50V
C803	1-124-598-11	ELECT	22uF	20%	25V
C804	1-102-959-00	CERAMIC	22PF	5%	50V
C805	1-102-959-00	CERAMIC	22PF	5%	50V
C806	1-164-159-11	CERAMIC	0.1uF		50V
C809	1-126-301-11	ELECT	1uF	20%	50V
C810	1-162-306-11	CERAMIC	0.01uF	20%	16V
C821	1-164-159-11	CERAMIC	0.1uF		50V
		< VIBRATOR >			
CF801	1-567-094-00	VIBRATOR, CERAMIC			
		< CONNECTOR >			
CN501	* 1-566-968-11	HOUSING, CONNECTOR (PC BOARD) 6P			
CN502	* 1-565-042-11	HOUSING, CONNECTOR (PC BOARD) 5P			
CN718	* 1-566-970-11	HOUSING, CONNECTOR (PC BOARD) 8P			
CN719	* 1-565-980-11	HOUSING, CONNECTOR (PC BOARD) 9P			
CN720	* 1-565-980-11	HOUSING, CONNECTOR (PC BOARD) 9P			
CN721	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CN722	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CN723	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CN801	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
CN802	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN803	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CN804	* 1-564-712-11	PIN, CONNECTOR (SMALL TYPE) 10P			
CN805	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
		< DIODE >			
D501	8-719-911-19	DIODE	1SS119		
D502	8-719-911-19	DIODE	1SS119		
D503	8-719-911-19	DIODE	1SS119		
D504	8-719-911-19	DIODE	1SS119		
D505	8-719-911-19	DIODE	1SS119		
D506	8-719-911-19	DIODE	1SS119		
D507	8-719-911-19	DIODE	1SS119		
D508	8-719-911-19	DIODE	1SS119		
D509	8-719-911-19	DIODE	1SS119		
D510	8-719-911-19	DIODE	1SS119		
D511	8-719-911-19	DIODE	1SS119		
D512	8-719-911-19	DIODE	1SS119		
D513	8-719-911-19	DIODE	1SS119		
D514	8-719-911-19	DIODE	1SS119		
D515	8-719-911-19	DIODE	1SS119		
D516	8-719-911-19	DIODE	1SS119		
D517	8-719-911-19	DIODE	1SS119		

Ref. No.	Part No.	Description		Remark
D518	8-719-941-45	LED	GL5PR8	
D519	8-719-941-64	LED	GL5EG8	
D750	8-719-941-45	LED	GL5PR8 (CD)	
D751	8-719-941-45	LED	GL5PR8 (RADIO)	
D752	8-719-941-45	LED	GL5PR8-TD01LB (TAPE)	
D753	8-719-941-45	LED	GL5PR8-TD01LB (POWER)	
D801	8-719-911-19	DIODE	1SS119	
D802	8-719-911-19	DIODE	1SS119	
D803	8-719-911-19	DIODE	1SS119	
D804	8-719-911-19	DIODE	1SS119	
D805	8-719-911-19	DIODE	1SS119	
		< IC >		
IC501	8-759-151-26	IC	uPD1724GB-516-1A7	
IC706	8-749-920-83	IC	GP1U52XB	
IC801	8-752-819-99	IC	CXP5078-065Q	
IC804	8-759-970-47	IC	PST529J	
		< COIL >		
L501	1-410-521-11	INDUCTOR	100uH	
L801	1-410-521-11	INDUCTOR	100uH	
		< LIQUID CRYSTAL DISPLAY >		
ND501	1-809-027-11	DISPLAY PANEL, LIQUID CRYSTAL		
ND801	1-809-019-11	DISPLAY PANEL, LIQUID CRYSTAL		
		< PILOT LAMP >		
PL701	1-518-667-11	LAMP, PILOT		
PL702	1-518-667-11	LAMP, PILOT		
PL703	1-518-667-11	LAMP, PILOT		
		< TRANSISTOR >		
Q501	8-729-904-34	TRANSISTOR	DTA114TS	
Q502	8-729-806-30	TRANSISTOR	2SC4048	
Q503	8-729-178-62	TRANSISTOR	2SC2786-L	
Q504	8-729-806-30	TRANSISTOR	2SC4048	
Q505	8-729-119-32	TRANSISTOR	2SK193-E	
Q506	8-729-106-07	TRANSISTOR	2SK514-H	
Q507	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q801	8-729-920-68	TRANSISTOR	2SA933S-QR	
Q802	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q803	8-729-900-63	TRANSISTOR	DTA124ES	
Q804	8-729-119-76	TRANSISTOR	2SA1175-HFE	
		< RESISTOR >		
R501	1-249-425-11	CARBON	4.7K 5%	1/4W
R502	1-249-425-11	CARBON	4.7K 5%	1/4W
R503	1-249-425-11	CARBON	4.7K 5%	1/4W

CONTROL

Ref. No.	Part No.	Description				Remark
R504	1-249-425-11	CARBON	4.7K	5%	1/4W	
R505	1-249-425-11	CARBON	4.7K	5%	1/4W	
R506	1-249-441-11	CARBON	100K	5%	1/4W	
R507	1-249-437-11	CARBON	47K	5%	1/4W	
R508	1-249-421-11	CARBON	2.2K	5%	1/4W	
R509	1-249-433-11	CARBON	22K	5%	1/4W	
R510	1-249-411-11	CARBON	330	5%	1/4W	
R511	1-249-437-11	CARBON	47K	5%	1/4W	
R512	1-249-417-11	CARBON	1K	5%	1/4W	
R513	1-249-421-11	CARBON	2.2K	5%	1/4W	
R514	1-249-433-11	CARBON	22K	5%	1/4W	
R515	1-249-431-11	CARBON	15K	5%	1/4W	
R516	1-249-417-11	CARBON	1K	5%	1/4W	
R517	1-249-421-11	CARBON	2.2K	5%	1/4W	
R518	1-249-422-11	CARBON	2.7K	5%	1/4W	
R519	1-249-429-11	CARBON	10K	5%	1/4W	
R520	1-249-429-11	CARBON	10K	5%	1/4W	
R521	1-249-435-11	CARBON	33K	5%	1/4W	
R522	1-249-433-11	CARBON	22K	5%	1/4W	
R523	1-249-429-11	CARBON	10K	5%	1/4W	
R524	1-249-441-11	CARBON	100K	5%	1/4W	
R525	1-249-409-11	CARBON	220	5%	1/4W	
R526	1-249-417-11	CARBON	1K	5%	1/4W	
R801	1-249-418-11	CARBON	1.2K	5%	1/4W	
R802	1-249-418-11	CARBON	1.2K	5%	1/4W	
R803	1-249-418-11	CARBON	1.2K	5%	1/4W	
R804	1-249-418-11	CARBON	1.2K	5%	1/4W	
R805	1-249-418-11	CARBON	1.2K	5%	1/4W	
R806	1-249-418-11	CARBON	1.2K	5%	1/4W	
R807	1-249-420-11	CARBON	1.8K	5%	1/4W	
R808	1-249-420-11	CARBON	1.8K	5%	1/4W	
R809	1-249-420-11	CARBON	1.8K	5%	1/4W	
R810	1-249-420-11	CARBON	1.8K	5%	1/4W	
R811	1-249-420-11	CARBON	1.8K	5%	1/4W	
R812	1-249-420-11	CARBON	1.8K	5%	1/4W	
R813	1-247-887-00	CARBON	220K	5%	1/4W	
R814	1-249-423-11	CARBON	3.3K	5%	1/4W	
R815	1-249-423-11	CARBON	3.3K	5%	1/4W	
R816	1-249-423-11	CARBON	3.3K	5%	1/4W	
R817	1-249-423-11	CARBON	3.3K	5%	1/4W	
R818	1-249-423-11	CARBON	3.3K	5%	1/4W	
R820	1-249-428-11	CARBON	8.2K	5%	1/4W	
R821	1-249-428-11	CARBON	8.2K	5%	1/4W	
R822	1-249-428-11	CARBON	8.2K	5%	1/4W	
R823	1-249-428-11	CARBON	8.2K	5%	1/4W	
R824	1-249-428-11	CARBON	8.2K	5%	1/4W	
R825	1-249-433-11	CARBON	22K	5%	1/4W	
R826	1-247-883-00	CARBON	150K	5%	1/4W	
R827	1-247-883-00	CARBON	150K	5%	1/4W	
R828	1-247-883-00	CARBON	150K	5%	1/4W	
R829	1-249-441-11	CARBON	100K	5%	1/4W	
R831	1-249-405-11	CARBON	100	5%	1/4W	
R832	1-249-425-11	CARBON	4.7K	5%	1/4W	
R833	1-249-425-11	CARBON	4.7K	5%	1/4W	
R834	1-249-426-11	CARBON	5.6K	5%	1/4W	
R835	1-249-425-11	CARBON	4.7K	5%	1/4W	
R836	1-249-425-11	CARBON	4.7K	5%	1/4W	
R837	1-249-425-11	CARBON	4.7K	5%	1/4W	
R838	1-247-889-00	CARBON	270K	5%	1/4W	
R842	1-247-899-11	CARBON	680K	5%	1/4W	
R843	1-249-437-11	CARBON	47K	5%	1/4W	
R844	1-247-891-00	CARBON	330K	5%	1/4W	
R845	1-247-891-00	CARBON	330K	5%	1/4W	
R846	1-249-441-11	CARBON	100K	5%	1/4W	
R847	1-249-429-11	CARBON	10K	5%	1/4W	

< SWITCH >

S501	1-572-200-11	SWITCH, KEYBOARD (M0)
S502	1-572-200-11	SWITCH, KEYBOARD (M1)
S503	1-572-200-11	SWITCH, KEYBOARD (M2)
S504	1-572-200-11	SWITCH, KEYBOARD (M3)
S505	1-572-200-11	SWITCH, KEYBOARD (M4)
S506	1-572-200-11	SWITCH, KEYBOARD (M5)
S507	1-572-200-11	SWITCH, KEYBOARD (M6)
S508	1-572-200-11	SWITCH, KEYBOARD (M7)
S509	1-572-200-11	SWITCH, KEYBOARD (M-IN)
S510	1-572-200-11	SWITCH, KEYBOARD (M8)
S511	1-572-200-11	SWITCH, KEYBOARD (M9)
S512	1-572-200-11	SWITCH, KEYBOARD (M+10)
S513	1-572-200-11	SWITCH, KEYBOARD (UP)
S514	1-572-200-11	SWITCH, KEYBOARD (DOWN)
S515	1-572-200-11	SWITCH, KEYBOARD (FM)
S516	1-572-200-11	SWITCH, KEYBOARD (AM)
S703	1-572-619-11	SWITCH, SLIDE (TIMER MODE)
S704	1-572-619-11	SWITCH, SLIDE (CD DUBBING MODE)
S705	1-572-200-11	SWITCH, KEYBOARD (POWER)
S706	1-572-200-11	SWITCH, KEYBOARD (TAPE/DUB)
S707	1-572-200-11	SWITCH, KEYBOARD (TUNER)
S708	1-572-200-11	SWITCH, KEYBOARD (CD)
S803	1-572-200-11	SWITCH, KEYBOARD (STOP)
S804	1-572-200-11	SWITCH, KEYBOARD (PAUSE)
S805	1-572-200-11	SWITCH, KEYBOARD (PLAY)
S806	1-572-200-11	SWITCH, KEYBOARD (SEARCH REW)
S807	1-572-200-11	SWITCH, KEYBOARD (SEARCH FF)
S808	1-572-200-11	SWITCH, KEYBOARD (REW/INTRO SCAN)
S809	1-572-200-11	SWITCH, KEYBOARD (FF/PGM CHECK)
S810	1-572-200-11	SWITCH, KEYBOARD (+10 AM/PM)

Ref. No.	Part No.	Description			Remark
S811	1-572-200-11	SWITCH, KEYBOARD (CLOCK)			
S812	1-572-200-11	SWITCH, KEYBOARD (TIMER)			
S813	1-572-200-11	SWITCH, KEYBOARD (SLEEP)			
S814	1-572-200-11	SWITCH, KEYBOARD (STANDBY)			
S815	1-572-200-11	SWITCH, KEYBOARD (DISPLAY)			
S816	1-572-200-11	SWITCH, KEYBOARD (EDIT/CLEAR)			
S817	1-572-200-11	SWITCH, KEYBOARD (AUTO/SPACE)			
S818	1-572-200-11	SWITCH, KEYBOARD (REPEAT)			
S819	1-572-200-11	SWITCH, KEYBOARD (PRO/SHUFF)			
S820	1-572-200-11	SWITCH, KEYBOARD (1)			
S821	1-572-200-11	SWITCH, KEYBOARD (2)			
S822	1-572-200-11	SWITCH, KEYBOARD (3)			
S823	1-572-200-11	SWITCH, KEYBOARD (4)			
S824	1-572-200-11	SWITCH, KEYBOARD (5)			
S825	1-572-200-11	SWITCH, KEYBOARD (6)			
S826	1-572-200-11	SWITCH, KEYBOARD (7)			
S827	1-572-200-11	SWITCH, KEYBOARD (8)			
S828	1-572-200-11	SWITCH, KEYBOARD (9)			
S829	1-572-200-11	SWITCH, KEYBOARD (0)			
		< CRYSTAL >			
X501	1-577-556-11	VIBRATOR, CRYSTAL 75KHz			
X801	1-567-098-00	VIBRATOR, CRYSTAL 3.58MHz			
**********					
*	A-3261-164-A	MAIN BOARD, COMPLETE			
		**********			
*	1-535-303-00	WIRE, JUMPER			
	9-911-840-XX	CUSHION (U)			
		< CAPACITOR >			
C1	1-162-306-11	CERAMIC	0.01uF	20%	16V
C2	1-162-294-31	CERAMIC	0.001uF	10%	50V
C3	1-124-472-11	ELECT	470uF	20%	10V
C4	1-162-306-11	CERAMIC	0.01uF	20%	16V
C5	1-162-197-31	CERAMIC	6.8PF	10%	50V
C6	1-162-306-11	CERAMIC	0.01uF	20%	16V
C7	1-162-190-31	CERAMIC	1.8PF	20%	50V
C8	1-162-205-31	CERAMIC	18PF	5%	50V
C9	1-162-206-31	CERAMIC	20PF	5%	50V
C10	1-101-059-00	CERAMIC	510PF	5%	50V
C11	1-162-187-31	CERAMIC	1PF	20%	50V
C12	1-161-055-00	CERAMIC	0.022uF	10%	50V
C13	1-162-306-11	CERAMIC	0.01uF	20%	16V
C14	1-124-925-11	ELECT	2.2uF	20%	100V
C15	1-124-443-00	ELECT	100uF	20%	10V
C16	1-162-306-11	CERAMIC	0.01uF	20%	16V

Ref. No.	Part No.	Description			Remark
C19	1-124-927-11	ELECT	4.7uF	20%	100V
C20	1-124-903-11	ELECT	1uF	20%	50V
C21	1-124-477-11	ELECT	47uF	20%	25V
C22	1-124-477-11	ELECT	47uF	20%	25V
C23	1-162-306-11	CERAMIC	0.01uF	20%	16V
C24	1-124-902-00	ELECT	0.47uF	20%	50V
C25	1-124-902-00	ELECT	0.47uF	20%	50V
C26	1-161-020-11	CERAMIC	0.039uF	10%	25V
C27	1-161-020-11	CERAMIC	0.039uF	10%	25V
C28	1-124-903-11	ELECT	1uF	20%	50V
C29	1-124-902-00	ELECT	0.47uF	20%	50V
C30	1-124-927-11	ELECT	4.7uF	20%	100V
C31	1-162-306-11	CERAMIC	0.01uF	20%	16V
C32	1-162-306-11	CERAMIC	0.01uF	20%	16V
C33	1-162-306-11	CERAMIC	0.01uF	20%	16V
C34	1-162-294-31	CERAMIC	0.001uF	10%	50V
C35	1-162-306-11	CERAMIC	0.01uF	20%	16V
C36	1-162-306-11	CERAMIC	0.01uF	20%	16V
C37	1-162-282-31	CERAMIC	100PF	10%	50V
C38	1-162-294-31	CERAMIC	0.001uF	10%	50V
C39	1-162-306-11	CERAMIC	0.01uF	20%	16V
C40	1-162-294-31	CERAMIC	0.001uF	10%	50V
C41	1-162-306-11	CERAMIC	0.01uF	20%	16V
C42	1-162-282-31	CERAMIC	100PF	10%	50V
C43	1-164-098-11	CERAMIC	0.047uF		12V
C44	1-162-294-31	CERAMIC	0.001uF	10%	50V
C45	1-162-294-31	CERAMIC	0.001uF	10%	50V
C46	1-124-477-11	ELECT	47uF	20%	25V
C47	1-162-294-31	CERAMIC	0.001uF	10%	50V
C48	1-162-294-31	CERAMIC	0.001uF	10%	50V
C49	1-162-294-31	CERAMIC	0.001uF	10%	50V
C50	1-162-294-31	CERAMIC	0.001uF	10%	50V
C51	1-164-159-11	CERAMIC	0.1uF		50V
C95	1-162-294-31	CERAMIC	0.001uF	10%	50V
C96	1-162-282-31	CERAMIC	100PF	10%	50V
C101	1-124-903-11	ELECT	1uF	20%	50V
C102	1-162-199-31	CERAMIC	10PF	5%	50V
C103	1-124-927-11	ELECT	4.7uF	20%	100V
C104	1-162-215-31	CERAMIC	47PF	5%	50V
C105	1-124-902-00	ELECT	0.47uF	20%	50V
C106	1-124-902-00	ELECT	0.47uF	20%	50V
C107	1-124-902-00	ELECT	0.47uF	20%	50V
C108	1-124-902-00	ELECT	0.47uF	20%	50V
C109	1-130-476-00	MYLAR	0.0027uF	5%	50V
C110	1-162-294-31	CERAMIC	0.001uF	10%	50V
C111	1-124-903-11	ELECT	1uF	20%	50V
C113	1-130-492-11	MYLAR	0.056uF	5%	50V
C114	1-124-903-11	ELECT	1uF	20%	50V
C115	1-130-467-00	MYLAR	470PF	5%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C116	1-136-157-00	MYLAR	0.022uF	10%	50V
C201	1-124-903-11	ELECT	1uF	20%	50V
C202	1-162-199-31	CERAMIC	10PF	5%	50V
C203	1-124-927-11	ELECT	4.7uF	20%	100V
C204	1-162-215-31	CERAMIC	47PF	5%	50V
C205	1-124-902-00	ELECT	0.47uF	20%	50V
C206	1-124-902-00	ELECT	0.47uF	20%	50V
C207	1-124-902-00	ELECT	0.47uF	20%	50V
C208	1-124-902-00	ELECT	0.47uF	20%	50V
C209	1-130-476-00	MYLAR	0.0027uF	5%	50V
C210	1-162-294-31	CERAMIC	0.001uF	10%	50V
C211	1-124-903-11	ELECT	1uF	20%	50V
C213	1-130-492-11	MYLAR	0.056uF	5%	50V
C214	1-124-903-11	ELECT	1uF	20%	50V
C215	1-130-467-00	MYLAR	470PF	5%	50V
C216	1-136-157-00	MYLAR	0.022uF	10%	50V
C701	1-164-159-11	CERAMIC	0.1uF		50V
C702	1-124-584-00	ELECT	100uF	20%	10V
C703	1-130-467-00	MYLAR	470PF	5%	50V
C704	1-130-467-00	MYLAR	470PF	5%	50V
C705	1-161-379-00	CERAMIC	0.01uF	20%	25V
C706	1-136-159-00	MYLAR	0.033uF	10%	50V
C707	1-126-233-11	ELECT	22uF	20%	50V
C708	1-130-467-00	MYLAR	470PF	5%	50V
C709	1-130-471-00	MYLAR	0.001uF	5%	50V
C710	1-124-477-11	ELECT	47uF	20%	25V
C711	1-124-472-11	ELECT	470uF	20%	10V
C712	1-164-159-11	CERAMIC	0.1uF		50V
C713	1-124-927-11	ELECT	4.7uF	20%	100V
C714	1-162-294-31	CERAMIC	0.001uF	10%	50V
C715	1-164-159-11	CERAMIC	0.1uF		50V
C716	1-161-379-00	CERAMIC	0.01uF	20%	25V
C721	1-136-165-00	FILM	0.1uF	5%	50V
C722	1-124-902-00	ELECT	0.47uF	20%	50V
C723	1-124-925-11	ELECT	2.2uF	20%	100V
C724	1-124-589-11	ELECT	47uF	20%	16V
C725	1-161-379-00	CERAMIC	0.01uF	20%	25V
C726	1-161-379-00	CERAMIC	0.01uF	20%	25V
C727	1-161-379-00	CERAMIC	0.01uF	20%	25V
C728	1-161-379-00	CERAMIC	0.01uF	20%	25V
C729	1-161-379-00	CERAMIC	0.01uF	20%	25V
C730	1-162-282-31	CERAMIC	100PF	10%	50V
C731	1-161-379-00	CERAMIC	0.01uF	20%	25V
C732	1-164-159-11	CERAMIC	0.1uF		50V
C733	1-161-379-00	CERAMIC	0.01uF	20%	25V
C738	1-161-379-00	CERAMIC	0.01uF	20%	25V
C739	1-161-379-00	CERAMIC	0.01uF	20%	25V
C740	1-162-282-31	CERAMIC	100PF	10%	50V
C741	1-161-379-00	CERAMIC	0.01uF	20%	25V
C742	1-161-379-00	CERAMIC	0.01uF	20%	25V
C753	1-161-379-00	CERAMIC	0.01uF	20%	25V
C754	1-161-379-00	CERAMIC	0.01uF	20%	25V
C755	1-161-379-00	CERAMIC	0.01uF	20%	25V
C756	1-161-379-00	CERAMIC	0.01uF	20%	25V
C757	1-161-379-00	CERAMIC	0.01uF	20%	25V
C758	1-161-379-00	CERAMIC	0.01uF	20%	25V
C759	1-126-157-11	ELECT	10uF	20%	16V
C760	1-124-477-11	ELECT	47uF	20%	25V
C761	1-124-472-11	ELECT	470uF	20%	10V
C762	1-124-902-00	ELECT	0.47uF	20%	50V
C765	1-124-902-00	ELECT	0.47uF	20%	50V
C766	1-126-301-11	ELECT	1uF	20%	50V

< CERAMIC FILTER >

CF1	1-577-600-11	FILTER, CERAMIC
CF2	1-577-600-11	FILTER, CERAMIC
CF3	1-577-600-11	FILTER, CERAMIC
CF701	1-578-787-21	VIBRATOR, CERAMIC

< CONNECTOR >

CN1	* 1-566-214-11	PIN, CONNECTOR (PC BOARD) 2P
CN2	* 1-566-971-11	PIN, CONNECTOR (PC BOARD) 6P
CN3	* 1-565-041-11	PIN, CONNECTOR (PC BOARD) 5P
CN4	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
CN750	* 1-564-717-11	PIN, CONNECTOR (SMALL TYPE) 15P
CN751	* 1-564-712-11	PIN, CONNECTOR (SMALL TYPE) 10P
CN752	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P
CN753	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
CN754	* 1-564-714-11	PIN, CONNECTOR (SMALL TYPE) 12P
CN755	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P
CN756	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
CN757	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
CN758	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
CN759	* 1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P
CN760	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P
CN761	* 1-566-973-11	PIN, CONNECTOR (PC BOARD) 8P
CN762	* 1-568-454-11	PIN, CONNECTOR (PC BOARD) 9P
CN763	* 1-568-454-11	PIN, CONNECTOR (PC BOARD) 9P
CN764	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P
CN765	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P

< ENCAPSULATED COMPONENT >

CP1	1-236-571-11	ENCAPSULATED COMPONENT

< LOW PASS FILTER >

CP2	1-236-836-11	FILTER, LOW PASS
CP3	1-236-836-11	FILTER, LOW PASS

Ref. No.	Part No.	Description	Remark
		< TRIMMER >	
CT1	1-141-410-11	CAP, ADJ 10PF	
CT2	1-141-411-11	CAP, ADJ 20PF	
		< DIODE >	
D1	8-719-911-19	DIODE 1SS119	
D2	8-719-911-19	DIODE 1SS119	
D3	8-719-980-65	DIODE SVC203RA-V	
D4	8-719-980-65	DIODE SVC203RA-V	
D5	8-719-980-73	DIODE SVC342LM-V	
D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D703	8-719-911-19	DIODE 1SS119	
D704	8-719-911-19	DIODE 1SS119	
D705	8-719-911-19	DIODE 1SS119	
D706	8-719-911-19	DIODE 1SS119	
D708	8-719-911-19	DIODE 1SS119	
D709	8-719-911-19	DIODE 1SS119	
D710	8-719-911-19	DIODE 1SS119	
D711	8-719-911-19	DIODE 1SS119	
D712	8-719-911-19	DIODE 1SS119	
D713	8-719-911-19	DIODE 1SS119	
D714	8-719-911-19	DIODE 1SS119	
D715	8-719-911-19	DIODE 1SS119	
D716	8-719-911-19	DIODE 1SS119	
D717	8-719-911-19	DIODE 1SS119	
D718	8-719-911-19	DIODE 1SS119	
D719	8-719-911-19	DIODE 1SS119	
D720	8-719-911-19	DIODE 1SS119	
D721	8-719-911-19	DIODE 1SS119	
D722	8-719-911-19	DIODE 1SS119	
D723	8-719-911-19	DIODE 1SS119	
D724	8-719-911-19	DIODE 1SS119	
D726	8-719-911-19	DIODE 1SS119	
D727	8-719-911-19	DIODE 1SS119	
		< FILTER >	
FL1	1-236-022-11	FILTER, BAND PASS	
		< IC >	
IC1	8-752-050-20	IC CXA1238S	
IC101	8-759-945-58	IC RC4558P	
IC201	8-759-945-58	IC RC4558P	
IC701	8-759-634-33	IC M50720-192SP	
IC702	8-759-800-33	IC LC7815H	
IC703	8-759-000-49	IC MC14066BCP	
IC704	8-759-971-15	IC PST529H	
IC705	8-759-996-21	IC RE5RA50A-C	

Ref. No.	Part No.	Description	Remark
		< JACK >	
J701	1-563-716-11	JACK, PIN (CD OUT)	
J702	1-568-122-11	JACK (MIX MIC)	
		< COIL >	
L1	1-426-506-11	COIL (RF)	
L2	1-406-386-11	COIL (OSC)	
L3	1-406-387-11	COIL (OSC)	
L4	1-402-502-11	ANTENNA, FERRITE-ROD (MW)	
L701	1-410-521-11	INDUCTOR 100uH	
L702	1-410-521-11	INDUCTOR 100uH	
L703	1-410-521-11	INDUCTOR 100uH	
L704	1-410-521-11	INDUCTOR 100uH	
L705	1-410-521-11	INDUCTOR 100uH	
L706	1-410-521-11	INDUCTOR 100uH	
L707	1-410-521-11	INDUCTOR 100uH	
L709	1-410-521-11	INDUCTOR 100uH	
L711	1-410-521-11	INDUCTOR 100uH	
L716	1-410-521-11	INDUCTOR 100uH	
L717	1-410-521-11	INDUCTOR 100uH	
L718	1-410-521-11	INDUCTOR 100uH	
L729	1-410-521-11	INDUCTOR 100uH	
L730	1-410-521-11	INDUCTOR 100uH	
L731	1-410-521-11	INDUCTOR 100uH	
L732	1-410-521-11	INDUCTOR 100uH	
L733	1-410-521-11	INDUCTOR 100uH	
L734	1-410-521-11	INDUCTOR 100uH	
L735	1-424-090-11	COIL, LINE FILTER	
L737	1-410-517-11	INDUCTOR 47uH	
L738	1-410-517-11	INDUCTOR 47uH	
L739	1-424-090-11	COIL, LINE FILTER	
L741	1-410-521-11	INDUCTOR 100uH	
L742	1-424-090-11	COIL, LINE FILTER	
		< TRANSISTOR >	
Q1	8-729-806-30	TRANSISTOR 2SC4048	
Q2	8-729-806-30	TRANSISTOR 2SC4048	
Q3	8-729-905-50	TRANSISTOR DTC343TS	
Q4	8-729-905-50	TRANSISTOR DTC343TS	
Q5	8-729-806-30	TRANSISTOR 2SC4048	
Q6	8-729-672-42	TRANSISTOR 2SC2724-C	
Q7	8-729-178-62	TRANSISTOR 2SC2786-L	
Q8	8-729-178-62	TRANSISTOR 2SC2786-L	
Q102	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q103	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q104	8-729-806-30	TRANSISTOR 2SC4048	
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q203	8-729-119-78	TRANSISTOR 2SC2785-HFE	

MAIN

Ref. No.	Part No.	Description		Remark
Q204	8-729-806-30	TRANSISTOR	2SC4048	
Q701	8-729-206-35	TRANSISTOR	RN2206	
Q702	8-729-206-35	TRANSISTOR	RN2206	
Q703	8-729-900-85	TRANSISTOR	DTC144WS	
Q704	8-729-206-35	TRANSISTOR	RN2206	
Q705	8-729-806-30	TRANSISTOR	2SC4048	
Q706	8-729-900-85	TRANSISTOR	DTC144WS	
Q707	8-729-206-35	TRANSISTOR	RN2206	
Q708	8-729-206-35	TRANSISTOR	RN2206	
Q709	8-729-206-35	TRANSISTOR	RN2206	
Q710	8-729-206-35	TRANSISTOR	RN2206	
Q711	8-729-206-35	TRANSISTOR	RN2206	
Q712	8-729-206-35	TRANSISTOR	RN2206	
Q713	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q714	8-729-806-30	TRANSISTOR	2SC4048	
Q716	8-729-206-35	TRANSISTOR	RN2206	
Q717	8-729-806-30	TRANSISTOR	2SC4048	
Q718	8-729-206-35	TRANSISTOR	RN2206	
Q720	8-729-806-30	TRANSISTOR	2SC4048	
Q721	8-729-900-85	TRANSISTOR	DTC144WS	
Q724	8-729-206-35	TRANSISTOR	RN2206	
Q725	8-729-206-35	TRANSISTOR	RN2206	
Q726	8-729-206-35	TRANSISTOR	RN2206	

< RESISTOR >

Ref. No.	Part No.	Description			
R1	1-249-441-11	CARBON	100K	5%	1/4W
R2	1-249-441-11	CARBON	100K	5%	1/4W
R3	1-249-431-11	CARBON	15K	5%	1/4W
R4	1-249-441-11	CARBON	100K	5%	1/4W
R5	1-249-437-11	CARBON	47K	5%	1/4W
R6	1-249-437-11	CARBON	47K	5%	1/4W
R7	1-249-421-11	CARBON	2.2K	5%	1/4W
R8	1-249-411-11	CARBON	330	5%	1/4W
R9	1-249-405-11	CARBON	100	5%	1/4W
R10	1-249-429-11	CARBON	10K	5%	1/4W
R11	1-249-418-11	CARBON	1.2K	5%	1/4W
R12	1-249-427-11	CARBON	6.8K	5%	1/4W
R13	1-249-427-11	CARBON	6.8K	5%	1/4W
R14	1-249-418-11	CARBON	1.2K	5%	1/4W
R15	1-249-421-11	CARBON	2.2K	5%	1/4W
R16	1-247-887-00	CARBON	220K	5%	1/4W
R17	1-247-887-00	CARBON	220K	5%	1/4W
R18	1-249-429-11	CARBON	10K	5%	1/4W
R19	1-249-405-11	CARBON	100	5%	1/4W
R20	1-249-425-11	CARBON	4.7K	5%	1/4W
R21	1-249-425-11	CARBON	4.7K	5%	1/4W
R22	1-249-415-11	CARBON	680	5%	1/4W
R23	1-249-417-11	CARBON	1K	5%	1/4W
R24	1-249-439-11	CARBON	68K	5%	1/4W
R25	1-249-439-11	CARBON	68K	5%	1/4W
R26	1-249-417-11	CARBON	1K	5%	1/4W
R27	1-249-417-11	CARBON	1K	5%	1/4W
R28	1-249-439-11	CARBON	68K	5%	1/4W
R29	1-249-417-11	CARBON	1K	5%	1/4W
R31	1-249-405-11	CARBON	100	5%	1/4W
R32	1-249-426-11	CARBON	5.6K	5%	1/4W
R33	1-249-411-11	CARBON	330	5%	1/4W
R34	1-249-405-11	CARBON	100	5%	1/4W
R36	1-249-405-11	CARBON	100	5%	1/4W
R37	1-249-425-11	CARBON	4.7K	5%	1/4W
R38	1-249-425-11	CARBON	4.7K	5%	1/4W
R101	1-249-441-11	CARBON	100K	5%	1/4W
R102	1-247-903-00	CARBON	1M	5%	1/4W
R103	1-249-426-11	CARBON	5.6K	5%	1/4W
R104	1-249-428-11	CARBON	8.2K	5%	1/4W
R105	1-249-435-11	CARBON	33K	5%	1/4W
R106	1-249-433-11	CARBON	22K	5%	1/4W
R107	1-249-429-11	CARBON	10K	5%	1/4W
R108	1-249-429-11	CARBON	10K	5%	1/4W
R109	1-249-441-11	CARBON	100K	5%	1/4W
R110	1-249-434-11	CARBON	27K	5%	1/4W
R111	1-249-437-11	CARBON	47K	5%	1/4W
R112	1-249-425-11	CARBON	4.7K	5%	1/4W
R113	1-247-852-11	CARBON	7.5K	5%	1/4W
R115	1-249-437-11	CARBON	47K	5%	1/4W
R116	1-249-435-11	CARBON	33K	5%	1/4W
R201	1-249-441-11	CARBON	100K	5%	1/4W
R202	1-247-903-00	CARBON	1M	5%	1/4W
R203	1-249-426-11	CARBON	5.6K	5%	1/4W
R204	1-249-428-11	CARBON	8.2K	5%	1/4W
R205	1-249-435-11	CARBON	33K	5%	1/4W
R206	1-249-433-11	CARBON	22K	5%	1/4W
R207	1-249-429-11	CARBON	10K	5%	1/4W
R208	1-249-429-11	CARBON	10K	5%	1/4W
R209	1-249-441-11	CARBON	100K	5%	1/4W
R210	1-249-434-11	CARBON	27K	5%	1/4W
R211	1-249-437-11	CARBON	47K	5%	1/4W
R212	1-249-425-11	CARBON	4.7K	5%	1/4W
R213	1-247-852-11	CARBON	7.5K	5%	1/4W
R215	1-249-437-11	CARBON	47K	5%	1/4W
R216	1-249-435-11	CARBON	33K	5%	1/4W
R701	1-249-437-11	CARBON	47K	5%	1/4W
R702	1-249-437-11	CARBON	47K	5%	1/4W
R703	1-249-437-11	CARBON	47K	5%	1/4W
R704	1-249-437-11	CARBON	47K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W

MAIN MD CONTROL

Ref. No.	Part No.	Description				Remark
R706	1-249-437-11	CARBON	47K	5%	1/4W	
R707	1-249-429-11	CARBON	10K	5%	1/4W	
R708	1-247-899-11	CARBON	680K	5%	1/4W	
R709	1-249-440-11	CARBON	82K	5%	1/4W	
R710	1-247-903-00	CARBON	1M	5%	1/4W	
R711	1-249-433-11	CARBON	22K	5%	1/4W	
R712	1-249-439-11	CARBON	68K	5%	1/4W	
R713	1-249-437-11	CARBON	47K	5%	1/4W	
R714	1-249-425-11	CARBON	4.7K	5%	1/4W	
R715	1-249-437-11	CARBON	47K	5%	1/4W	
R716	1-247-903-00	CARBON	1M	5%	1/4W	
R717	1-249-437-11	CARBON	47K	5%	1/4W	
R718	1-249-437-11	CARBON	47K	5%	1/4W	
R719	1-249-437-11	CARBON	47K	5%	1/4W	
R720	1-249-417-11	CARBON	1K	5%	1/4W	
R721	1-249-417-11	CARBON	1K	5%	1/4W	
R722	1-247-891-00	CARBON	330K	5%	1/4W	
R723	1-249-405-11	CARBON	100	5%	1/4W	
R724	1-249-418-11	CARBON	1.2K	5%	1/4W	
R725	1-249-437-11	CARBON	47K	5%	1/4W	
R726	1-249-416-11	CARBON	820	5%	1/4W	
R727	1-249-418-11	CARBON	1.2K	5%	1/4W	
R728	1-249-412-11	CARBON	390	5%	1/4W	
R729	1-249-417-11	CARBON	1K	5%	1/4W	
R730	1-249-417-11	CARBON	1K	5%	1/4W	
R731	1-247-887-00	CARBON	220K	5%	1/4W	
R732	1-249-429-11	CARBON	10K	5%	1/4W	
R733	1-249-417-11	CARBON	1K	5%	1/4W	
R734	1-249-439-11	CARBON	68K	5%	1/4W	
R735	1-249-429-11	CARBON	10K	5%	1/4W	
R736	1-249-429-11	CARBON	10K	5%	1/4W	
R737	1-249-405-11	CARBON	100	5%	1/4W	
R738	1-249-405-11	CARBON	100	5%	1/4W	
R739	1-249-393-11	CARBON	10	5%	1/4W	
R740	1-249-393-11	CARBON	10	5%	1/4W	
R741	1-247-895-00	CARBON	470K	5%	1/4W	

< VARIABLE RESISTOR >

RV1	1-238-601-11	RES, ADJ, CARBON 22K

< SWITCH >

S1	1-572-622-11	SWITCH, SLIDE (FM SENS)
S701	1-571-307-11	SWITCH, SLIDE (ISS)

****

Ref. No.	Part No.	Description	Remark
	* A-3289-767-A	MD CONTROL BOARD, COMPLETE	
		**********	

< CONNECTOR >

CN609	* 1-564-714-11	PIN, CONNECTOR (SMALL TYPE) 12P	

< DIODE >

D650	8-719-971-50	LED	MBG3371X-177 (A REV)
D651	8-719-971-52	LED	MAY3371X-M-177 (A PAUSE)
D652	8-719-971-50	LED	MBG3371X-177 (A FWD)
D653	8-719-971-52	LED	MAY3371X-M-177 (A DECK)
D654	8-719-911-19	DIODE	1SS119
D655	8-719-911-19	DIODE	1SS119
D656	8-719-971-52	LED	MAY3371X-M-177 (B DECK)
D657	8-719-980-98	LED	MVR3371X (DUBBING)
D658	8-719-971-50	LED	MBG3371X-177 (B REV)
D659	8-719-980-98	LED	MVR3371X (B REC)
D660	8-719-971-52	LED	MAY3371X-M-177 (B PAUSE)
D661	8-719-971-50	LED	MBG3371X-177 (B FWD)
D662	8-719-911-19	DIODE	1SS119
D663	8-719-911-19	DIODE	1SS119
D664	8-719-911-19	DIODE	1SS119
D665	8-719-911-19	DIODE	1SS119

< JUMPER >

JW601	* 1-535-303-00	WIRE, JUMPER
JW602	* 1-535-303-00	WIRE, JUMPER
JW603	* 1-535-303-00	WIRE, JUMPER
JW604	* 1-535-303-00	WIRE, JUMPER
JW605	* 1-535-303-00	WIRE, JUMPER

< RESISTOR >

R660	1-249-412-11	CARBON	390	5%	1/4W	
R661	1-249-412-11	CARBON	390	5%	1/4W	
R662	1-249-412-11	CARBON	390	5%	1/4W	
R663	1-249-412-11	CARBON	390	5%	1/4W	
R664	1-249-412-11	CARBON	390	5%	1/4W	
R665	1-249-419-11	CARBON	1.5K	5%	1/4W	
R666	1-249-412-11	CARBON	390	5%	1/4W	
R667	1-249-419-11	CARBON	1.5K	5%	1/4W	
R668	1-249-412-11	CARBON	390	5%	1/4W	
R669	1-249-412-11	CARBON	390	5%	1/4W	
R670	1-249-429-11	CARBON	10K	5%	1/4W	
R671	1-249-429-11	CARBON	10K	5%	1/4W	
R672	1-249-429-11	CARBON	10K	5%	1/4W	

MD CONTROL POWER1 POWER2

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S601	1-572-200-11	SWITCH, KEYBOARD (DECK A)	
S602	1-572-200-11	SWITCH, KEYBOARD (DECK B)	
S603	1-572-200-11	SWITCH, KEYBOARD (HIGH)	
S604	1-572-200-11	SWITCH, KEYBOARD (MORM)	
S605	1-572-200-11	SWITCH, KEYBOARD (REW)	
S606	1-572-200-11	SWITCH, KEYBOARD (FF)	
S607	1-572-200-11	SWITCH, KEYBOARD (REV)	
S608	1-572-200-11	SWITCH, KEYBOARD (FWD)	
S609	1-572-200-11	SWITCH, KEYBOARD (STOP)	
S610	1-572-200-11	SWITCH, KEYBOARD (PAUSE)	
S611	1-572-200-11	SWITCH, KEYBOARD (REC)	
S612	1-572-200-11	SWITCH, KEYBOARD (AUTO PLAY)	
S613	1-570-866-11	SWITCH, SLIDE (AUTO SKIP)	
S614	1-570-866-11	SWITCH, SLIDE (DOLBY)	
S615	1-572-348-11	SWITCH, SLIDE (DIR MODE)	
		< CONNECTOR >	
W602	* 1-563-731-21	SOCKET, CONNECTOR 19P	
		**********	
	* 1-635-038-11	POWER1 BOARD	
		**********	
	* 1-533-189-11	HOLDER, FUSE	
	7-685-646-79	SCREW, TAPPING +BV 3X8	
		< CAPACITOR >	
C901	1-161-379-00	CERAMIC 0.01ul 20% 25V	
C902	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C903	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C904	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C905	1-124-771-00	ELECT 6800uF 20% 25V	
		< CONNECTOR >	
CN901	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
CN902	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
		< DIODE >	
D901	8-719-302-38	DIODE RBV-602-01	
D902	8-719-500-70	DIODE D5S4M	
		< FUSE >	
F901	⚠ 1-532-748-11	FUSE, GLASS TUBE (6.3A 125V)	
F902	⚠ 1-532-740-11	FUSE, GLASS TUBE (1A 125V)	

Ref. No.	Part No.	Description	Remark
		< JACK >	
J901	⚠ 1-526-818-11	INLET, AC	
		< LINE FILTER >	
LF901	⚠ 1-424-375-11	COIL, LINE FILTER	
		< TRANSFORMER >	
T901	⚠ 1-450-131-11	TRANSFORMER, POWER	
		**********	
	* A-3289-772-A	POWER2 BOARD, COMPLETE	
		**********	
	* 1-535-303-00	WIRE, JUMPER	
	7-685-646-79	SCREW, TAPPING +BV 3X8	
	7-685-647-79	SCREW, TAPPING +BV 3X10	
	* 4-937-671-01	HEAT SINK (D)	
	* 4-937-672-01	HEAT SINK (E)	
	* 4-937-673-01	HEAT SINK (F)	
		< CAPACITOR >	
C116	1-124-927-11	ELECT 4.7uF 20% 100V	
C117	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C118	1-126-101-11	ELECT 100uF 20% 16V	
C119	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C120	1-136-165-00	MYLAR 0.1uF 10% 50V	
C121	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C123	1-124-478-11	ELECT 100uF 20% 25V	
C124	1-136-159-00	MYLAR 0.033uF 10% 50V	
C125	1-124-477-11	ELECT 47uF 20% 25V	
C126	1-124-478-11	ELECT 100uF 20% 25V	
C127	1-136-159-00	MYLAR 0.033uF 10% 50V	
C216	1-124-927-11	ELECT 4.7uF 20% 100V	
C217	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C218	1-126-101-11	ELECT 100uF 20% 16V	
C219	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C220	1-136-165-00	MYLAR 0.1uF 10% 50V	
C221	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C223	1-124-478-11	ELECT 100uF 20% 25V	
C224	1-136-159-00	MYLAR 0.033uF 10% 50V	
C225	1-124-477-11	ELECT 47uF 20% 25V	
C226	1-124-478-11	ELECT 100uF 20% 25V	
C227	1-136-159-00	MYLAR 0.033uF 10% 50V	
C406	1-124-907-11	ELECT 10uF 20% 50V	
C407	1-124-119-00	ELECT 330uF 20% 16V	
C408	1-124-120-11	ELECT 220uF 20% 25V	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description				Remark
C409	1-124-636-00	ELECT	3300uF	20%	25V	
C410	1-124-902-00	ELECT	0.47uF	20%	50V	
C411	1-124-126-00	ELECT	47uF	20%	10V	
C412	1-124-126-00	ELECT	47uF	20%	10V	
C413	1-124-120-11	ELECT	220uF	20%	25V	
C414	1-124-126-00	ELECT	47uF	20%	10V	
C415	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C416	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C417	1-136-167-00	FILM	0.15uF	5%	50V	
C418	1-136-167-00	FILM	0.15uF	5%	50V	
C419	1-124-477-11	ELECT	47uF	20%	25V	
C420	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C421	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C422	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C423	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C424	1-124-360-00	ELECT	1000uF	20%	16V	
C425	1-126-101-11	ELECT	100uF	20%	16V	
C426	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C427	1-124-472-11	ELECT	470uF	20%	10V	
C428	1-124-472-11	ELECT	470uF	20%	10V	
C429	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C430	1-124-472-11	ELECT	470uF	20%	10V	
C431	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C432	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C433	1-124-472-11	ELECT	470uF	20%	10V	
C437	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C438	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C439	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C440	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C441	1-124-477-11	ELECT	47uF	20%	25V	
C442	1-162-280-31	CERAMIC	82PF	10%	50V	
C443	1-162-211-31	CERAMIC	33PF	5%	50V	
C444	1-161-021-11	CERAMIC	0.047uF	10%	25V	
C445	1-124-473-11	ELECT	1000uF	20%	10V	
C446	1-161-055-00	CERAMIC	0.022uF	10%	50V	
C447	1-161-055-00	CERAMIC	0.022uF	10%	50V	
C448	1-161-379-00	CERAMIC	0.01uF	20%	25V	

< CONNECTOR >

CN407	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE)	6P
CN408	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE)	7P
CN409	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE)	7P
CN410	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE)	2P
CN411	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE)	2P
CN412	* 1-564-717-11	PIN, CONNECTOR (SMALL TYPE)	15P
CN413	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE)	4P
CN414	* 1-564-707-11	PIN, CONNECTOR (SMALL TYPE)	5P
CN415	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE)	7P
CN416	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE)	3P
CN417	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE)	3P

< DIODE >

D401	8-719-110-03	DIODE	RD7.5ES-B2
D402	8-719-911-19	DIODE	1SS119
D405	8-719-911-19	DIODE	1SS119
D406	8-719-911-19	DIODE	1SS119
D408	8-719-911-19	DIODE	1SS119
D409	8-719-911-19	DIODE	1SS119
D410	8-719-911-19	DIODE	1SS119
D412	8-719-974-59	DIODE	1SR139-100
D413	8-719-974-59	DIODE	1SR139-100
D414	8-719-974-59	DIODE	1SR139-100
D415	8-719-974-59	DIODE	1SR139-100
D416	8-719-109-89	DIODE	RD5.6ES-B2
D417	8-719-109-93	DIODE	RD6.2ES-B2
D418	8-719-110-08	DIODE	RD8.2ES-B2
D420	8-719-974-59	DIODE	1SR139-100
D421	8-719-911-19	DIODE	1SS119
D422	8-719-911-19	DIODE	1SS119
D423	8-719-911-19	DIODE	1SS119
D424	8-719-911-19	DIODE	1SS119
D425	8-719-911-19	DIODE	1SS119
D426	8-719-110-46	DIODE	RD16ES-B3
D427	8-719-911-19	DIODE	1SS119
D428	8-719-911-19	DIODE	1SS119
D429	8-719-911-19	DIODE	1SS119
D430	8-719-911-19	DIODE	1SS119
D431	8-719-911-19	DIODE	1SS119
D432	8-719-911-19	DIODE	1SS119

< IC >

IC403	8-759-822-51	IC	LA4620
IC404	8-759-996-77	IC	BA3924
IC405	8-759-998-09	IC	S-80741AL
IC406	8-759-912-55	IC	S-81250HG
IC407	8-759-995-66	IC	RE5RA30A-C
IC408	8-759-996-21	IC	RE5RA50A-C
IC409	8-759-996-21	IC	RE5RA50A-C

< COIL >

L404	1-410-979-11	INDUCTOR	220uH
L406	1-410-521-11	INDUCTOR	100uH

< TRANSISTOR >

Q401	8-729-924-90	TRANSISTOR	2SB1370-EF
Q402	8-729-925-60	TRANSISTOR	DTA143ZS
Q403	8-729-806-30	TRANSISTOR	2SC4048

POWER2 | READER DETECTION | RELAY A | RELAY B

Ref. No.	Part No.	Description				Remark
Q404	8-729-115-28	TRANSISTOR	BN1L3Z-K			
Q405	8-729-900-85	TRANSISTOR	DTC144WS			
Q407	8-729-202-03	TRANSISTOR	2SD1408-Y			
Q408	8-729-801-84	TRANSISTOR	2SB1013-4			
Q409	8-729-806-30	TRANSISTOR	2SC4048			
Q410	8-729-806-30	TRANSISTOR	2SC4048			
Q411	8-729-202-03	TRANSISTOR	2SD1408-Y			
Q412	8-729-202-03	TRANSISTOR	2SD1408-Y			
Q414	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q415	8-729-119-78	TRANSISTOR	2SC2785-HFE			
		< RESISTOR >				
R104	1-249-411-11	CARBON	330	5%	1/4W	
R105	1-249-417-11	CARBON	1K	5%	1/4W	
R107	1-249-385-11	CARBON	2.2	5%	1/6W	
R108	1-249-405-11	CARBON	100	5%	1/4W	
R109	1-249-417-11	CARBON	1K	5%	1/4W	
R110	1-249-385-11	CARBON	2.2	5%	1/6W	
R204	1-249-411-11	CARBON	330	5%	1/4W	
R205	1-249-417-11	CARBON	1K	5%	1/4W	
R207	1-249-385-11	CARBON	2.2	5%	1/6W	
R208	1-249-405-11	CARBON	100	5%	1/4W	
R209	1-249-417-11	CARBON	1K	5%	1/4W	
R210	1-249-385-11	CARBON	2.2	5%	1/6W	
R405	1-249-429-11	CARBON	10K	5%	1/4W	
R406	1-249-437-11	CARBON	47K	5%	1/4W	
R407	1-249-409-11	CARBON	220	5%	1/4W	
R408	1-249-402-11	CARBON	56	5%	1/4W	
R412	1-249-417-11	CARBON	1K	5%	1/4W	
R413	⚠ 1-217-637-00	FUSIBLE	1	5%	1/4W	F
R414	1-249-409-11	CARBON	220	5%	1/4W	
R415	1-249-417-11	CARBON	1K	5%	1/4W	
R416	1-249-414-11	CARBON	560	5%	1/4W	
R417	1-249-417-11	CARBON	1K	5%	1/4W	
R418	1-249-429-11	CARBON	10K	5%	1/4W	
R419	1-249-409-11	CARBON	220	5%	1/4W	
R420	⚠ 1-217-637-00	FUSIBLE	1	5%	1/4W	F
R421	1-249-409-11	CARBON	220	5%	1/4W	
R422	⚠ 1-212-934-00	FUSIBLE	1	5%	1/2W	F
R424	1-249-417-11	CARBON	1K	5%	1/4W	
R425	1-249-441-11	CARBON	100K	5%	1/4W	
R426	1-249-440-11	CARBON	82K	5%	1/4W	
R427	1-249-437-11	CARBON	47K	5%	1/4W	
R428	1-249-405-11	CARBON	100	5%	1/4W	
R429	1-249-387-11	CARBON	3.3	5%	1/4W	
R430	1-249-429-11	CARBON	10K	5%	1/4W	
		< TERMINAL >				
SPJ1	1-537-238-11	TERMINAL BOARD				

Ref. No.	Part No.	Description	Remark
		< TRANSFORMER >	
T401	1-450-126-11	TRANSFORMER, DC-DC CONVERTER	
**********			
*	1-635-577-11	READER DETECTION BOARD	
		**********	
		< PHOTO INTERRUPTER >	
PH901	8-719-939-11	PHOTO INTERRUPTER GP-2S09-B (DECK B)	
**********			
*	1-635-163-11	RELAY A BOARD	
		**********	
	3-360-345-01	HOLDER (PHOTO)	
	9-911-844-XX	CUSHION (RM)	
		< CONNECTOR >	
CN681 *	1-564-723-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CN682 *	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P	
		< DIODE >	
D681	8-719-974-59	DIODE 1SR139-100	
		< PHOTO INTERUPTER >	
PH681	8-719-939-11	PHOTO INTERRUPTER GP-2S09-B	
		< SWITCH >	
S681	1-572-248-11	SWITCH, LEAF (HALF)	
S682	1-572-248-11	SWITCH, LEAF (NOR/CRO)	
S683	1-571-263-13	SWITCH (STOP)	
**********			
*	1-635-162-11	RELAY B BOARD	
		**********	
	3-360-345-01	HOLDER (PHOTO)	
	9-911-844-XX	CUSHION (RM)	
		< CONNECTOR >	
CN691 *	1-564-724-11	PIN, CONNECTOR (SMALL TYPE) 8P	
CN692 *	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P	
		< DIODE >	
D691	8-719-974-59	DIODE 1SR139-100	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

RELAY B TC

Ref. No.	Part No.	Description			Remark
		< PHOTO INTERUPTER >			
PH691	8-719-939-11	PHOTO INTERRUPTER GP-2S09-B			
		< SWITCH >			
S691	1-572-248-11	SWITCH, LEAF (REC A)			
S692	1-572-248-11	SWITCH, LEAF (REC B)			
S693	1-572-248-11	SWITCH, LEAF (HALF)			
S694	1-572-248-11	SWITCH, LEAF (NOR/CRO)			
S696	1-571-263-13	SWITCH (STOP)			
**********					
*	A-3289-769-A	TC BOARD, COMPLETE			
		**********			
*	1-535-303-00	WIRE, JUMPER			
		< CAPACITOR >			
C101	1-162-287-31	CERAMIC	270PF	10%	50V
C102	1-162-286-31	CERAMIC	220PF	10%	50V
C103	1-124-927-11	ELECT	4.7uF	20%	100V
C104	1-162-290-31	CERAMIC	470PF	10%	50V
C105	1-124-927-11	ELECT	4.7uF	20%	100V
C106	1-124-443-00	ELECT	100uF	20%	10V
C107	1-130-483-00	MYLAR	0.01uF	5%	50V
C108	1-124-927-11	ELECT	4.7uF	20%	100V
C109	1-124-903-11	ELECT	1uF	20%	50V
C110	1-162-285-31	CERAMIC	180PF	10%	50V
C111	1-124-927-11	ELECT	4.7uF	20%	100V
C112	1-162-285-31	CERAMIC	180PF	10%	50V
C113	1-124-927-11	ELECT	4.7uF	20%	100V
C114	1-124-927-11	ELECT	4.7uF	20%	100V
C115	1-124-927-11	ELECT	4.7uF	20%	100V
C116	1-124-927-11	ELECT	4.7uF	20%	100V
C117	1-131-587-11	TANTALUM	0.68uF	10%	35V
C118	1-124-907-11	ELECT	10uF	20%	50V
C119	1-124-902-00	ELECT	0.47uF	20%	50V
C120	1-124-903-11	ELECT	1uF	20%	50V
C121	1-162-282-31	CERAMIC	100PF	10%	50V
C122	1-124-903-11	ELECT	1uF	20%	50V
C123	1-130-483-00	MYLAR	0.01uF	5%	50V
C124	1-130-468-00	MYLAR	560PF	5%	50V
C125	1-162-285-31	CERAMIC	180PF	10%	50V
C126	1-162-286-31	CERAMIC	220PF	10%	50V
C127	1-162-282-31	CERAMIC	100PF	10%	50V
C128	1-162-285-31	CERAMIC	180PF	10%	50V
C201	1-162-287-31	CERAMIC	270PF	10%	50V
C202	1-162-286-31	CERAMIC	220PF	10%	50V

Ref. No.	Part No.	Description			Remark
C203	1-124-927-11	ELECT	4.7uF	20%	100V
C204	1-162-290-31	CERAMIC	470PF	10%	50V
C205	1-124-927-11	ELECT	4.7uF	20%	100V
C206	1-124-443-00	ELECT	100uF	20%	10V
C207	1-130-483-00	MYLAR	0.01uF	5%	50V
C208	1-124-927-11	ELECT	4.7uF	20%	100V
C209	1-124-903-11	ELECT	1uF	20%	50V
C210	1-162-285-31	CERAMIC	180PF	10%	50V
C211	1-124-927-11	ELECT	4.7uF	20%	100V
C212	1-162-285-31	CERAMIC	180PF	10%	50V
C213	1-124-927-11	ELECT	4.7uF	20%	100V
C214	1-124-927-11	ELECT	4.7uF	20%	100V
C215	1-124-927-11	ELECT	4.7uF	20%	100V
C216	1-124-927-11	ELECT	4.7uF	20%	100V
C217	1-131-587-11	TANTALUM	0.68uF	10%	35V
C218	1-124-907-11	ELECT	10uF	20%	50V
C219	1-124-902-00	ELECT	0.47uF	20%	50V
C220	1-124-903-11	ELECT	1uF	20%	50V
C221	1-162-282-31	CERAMIC	100PF	10%	50V
C222	1-124-903-11	ELECT	1uF	20%	50V
C223	1-130-483-00	MYLAR	0.01uF	5%	50V
C224	1-130-468-00	MYLAR	560PF	5%	50V
C225	1-162-285-31	CERAMIC	180PF	10%	50V
C226	1-162-286-31	CERAMIC	220PF	10%	50V
C227	1-162-282-31	CERAMIC	100PF	10%	50V
C228	1-162-285-31	CERAMIC	180PF	10%	50V
C301	1-124-927-11	ELECT	4.7uF	20%	100V
C302	1-124-443-00	ELECT	100uF	20%	10V
C303	1-124-927-11	ELECT	4.7uF	20%	100V
C304	1-124-443-00	ELECT	100uF	20%	10V
C306	1-124-903-11	ELECT	1uF	20%	50V
C307	1-124-903-11	ELECT	1uF	20%	50V
C308	1-162-282-31	CERAMIC	100PF	10%	50V
C309	1-124-443-00	ELECT	100uF	20%	10V
C310	1-126-176-11	ELECT	220uF	20%	10V
C311	1-124-443-00	ELECT	100uF	20%	10V
C312	1-124-902-00	ELECT	0.47uF	20%	50V
C313	1-124-443-00	ELECT	100uF	20%	10V
C314	1-126-176-11	ELECT	220uF	20%	10V
C315	1-162-294-31	CERAMIC	0.001uF	10%	50V
C316	1-136-165-00	FILM	0.1uF	5%	50V
C317	1-124-927-11	ELECT	4.7uF	20%	100V
C318	1-124-443-00	ELECT	100uF	20%	10V
C319	1-124-927-11	ELECT	4.7uF	20%	100V
C320	1-124-907-11	ELECT	10uF	20%	50V
C321	1-124-907-11	ELECT	10uF	20%	50V
C323	1-124-903-11	ELECT	1uF	20%	50V
C324	1-124-443-00	ELECT	100uF	20%	10V
C325	1-124-477-11	ELECT	47uF	20%	25V

TC

Ref. No.	Part No.	Description			Remark
C327	1-161-049-00	CERAMIC	0.0068uF	10%	50V
C328	1-161-049-00	CERAMIC	0.0068uF	10%	50V
C329	1-124-477-11	ELECT	47uF	20%	25V
C330	1-130-482-00	MYLAR	0.0082uF	5%	50V
C331	1-124-907-11	ELECT	10uF	20%	50V
C332	1-124-477-11	ELECT	47uF	20%	25V
C601	1-124-477-11	ELECT	47uF	20%	25V
C602	1-124-034-51	ELECT	33uF	20%	16V
C603	1-161-379-00	CERAMIC	0.01uF	20%	25V
C604	1-124-903-11	ELECT	1uF	20%	50V
C605	1-124-927-11	ELECT	4.7uF	20%	100V
C606	1-131-349-00	TANTALUM	2.2uF	10%	35V
C607	1-130-482-00	MYLAR	0.0082uF	5%	50V
C608	1-130-491-00	MYLAR	0.047uF	5%	50V
C609	1-162-843-11	CERAMIC	0.022uF	10%	16V
C610	1-126-233-11	ELECT	22uF	20%	50V
C611	1-126-233-11	ELECT	22uF	20%	50V
C612	1-124-903-11	ELECT	1uF	20%	50V
C613	1-124-903-11	ELECT	1uF	20%	50V
C614	1-124-907-11	ELECT	10uF	20%	50V
C615	1-161-051-00	CERAMIC	0.01uF	10%	50V
C616	1-161-051-00	CERAMIC	0.01uF	10%	50V
C617	1-124-903-11	ELECT	1uF	20%	50V
C618	1-124-903-11	ELECT	1uF	20%	50V
C619	1-162-843-11	CERAMIC	0.022uF	10%	16V
C620	1-124-907-11	ELECT	10uF	20%	50V
C621	1-124-907-11	ELECT	10uF	20%	50V
C622	1-136-174-00	FILM	0.56uF	5%	50V
C623	1-136-174-00	FILM	0.56uF	5%	50V
C624	1-124-907-11	ELECT	10uF	20%	50V
C625	1-162-851-11	CERAMIC	0.1uF	10%	16V
C626	1-162-851-11	CERAMIC	0.1uF	10%	16V
C627	1-161-021-11	CERAMIC	0.047uF	10%	25V
C628	1-124-902-00	ELECT	0.47uF	20%	50V
C650	1-124-477-11	ELECT	47uF	20%	25V
C690	1-124-907-11	ELECT	10uF	20%	50V

< CONNECTOR >

Ref. No.	Part No.	Description	Remark
CN301	* 1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P	
CN302	* 1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P	
CN303	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN304	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN305	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CN601	* 1-564-714-11	PIN, CONNECTOR (SMALL TYPE) 12P	
CN602	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
CN603	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
CN604	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CN605	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CN606	* 1-564-714-11	PIN, CONNECTOR (SMALL TYPE) 12P	
CN607	* 1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
CN608	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CN610	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CN611	* 1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
CN614	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
CN615	* 1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
CN616	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CN618	* 1-560-456-00	PIN, CONNECTOR 2P	
CN621	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	

< DIODE >

Ref. No.	Part No.	Description	Remark
D301	8-719-109-69	DIODE RD3.6ES-B2	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D601	8-719-911-19	DIODE 1SS119	
D602	8-719-911-19	DIODE 1SS119	
D603	8-719-911-19	DIODE 1SS119	
D604	8-719-109-60	DIODE RD2.7ES-B2	
D605	8-719-911-19	DIODE 1SS119	
D606	8-719-911-19	DIODE 1SS119	
D607	8-719-911-19	DIODE 1SS119	
D608	8-719-911-19	DIODE 1SS119	
D609	8-719-911-19	DIODE 1SS119	
D610	8-719-911-19	DIODE 1SS119	
D611	8-719-911-19	DIODE 1SS119	
D612	8-719-911-19	DIODE 1SS119	
D614	8-719-911-19	DIODE 1SS119	
D615	8-719-911-19	DIODE 1SS119	
D617	8-719-911-19	DIODE 1SS119	
D618	8-719-911-19	DIODE 1SS119	
D619	8-719-911-19	DIODE 1SS119	
D620	8-719-911-19	DIODE 1SS119	
D621	8-719-911-19	DIODE 1SS119	
D622	8-719-911-19	DIODE 1SS119	
D623	8-719-911-19	DIODE 1SS119	
D624	8-719-911-19	DIODE 1SS119	
D626	8-719-109-54	DIODE RD2.2ES-B2	
D627	8-719-911-19	DIODE 1SS119	
D632	8-719-911-19	DIODE 1SS119	
D633	8-719-911-19	DIODE 1SS119	
D634	8-719-911-19	DIODE 1SS119	
D635	8-719-911-19	DIODE 1SS119	
D636	8-719-911-19	DIODE 1SS119	
D637	8-719-911-19	DIODE 1SS119	
D638	8-719-109-60	DIODE RD2.7ES-B2	
D639	8-719-911-19	DIODE 1SS119	
D640	8-719-911-19	DIODE 1SS119	
D641	8-719-911-19	DIODE 1SS119	

Ref. No.	Part No.	Description		Remark
D642	8-719-911-19	DIODE	1SS119	
D644	8-719-911-19	DIODE	1SS119	
D670	8-719-911-19	DIODE	1SS119	
D671	8-719-911-19	DIODE	1SS119	
D672	8-719-911-19	DIODE	1SS119	
D673	8-719-911-19	DIODE	1SS119	
D696	8-719-911-19	DIODE	1SS119	
D697	8-719-911-19	DIODE	1SS119	
D698	8-719-911-19	DIODE	1SS119	
D699	8-719-911-19	DIODE	1SS119	
		< IC >		
IC301	8-759-143-54	IC	uPC1330HA	
IC302	8-752-053-17	IC	CXA1114P	
IC303	8-752-034-27	IC	CXA1102P	
IC304	8-752-038-00	IC	CXA1298AP	
IC601	8-759-239-76	IC	TC9315F	
IC602	8-759-933-22	IC	BA3707	
IC603	8-759-240-11	IC	TC4011BP	
		< COIL >		
L101	1-410-776-11	INDUCTOR	12mH	
L102	1-410-776-11	INDUCTOR	12mH	
L103	1-410-776-11	INDUCTOR	12mH	
L201	1-410-776-11	INDUCTOR	12mH	
L202	1-410-776-11	INDUCTOR	12mH	
L203	1-410-776-11	INDUCTOR	12mH	
L301	1-408-426-00	INDUCTOR	270uH	
L601	1-408-418-00	INDUCTOR	56uH	
		< TRANSISTOR >		
Q101	8-729-905-50	TRANSISTOR	DTC343TS	
Q103	8-729-905-50	TRANSISTOR	DTC343TS	
Q104	8-729-904-39	TRANSISTOR	DTC114TS	
Q105	8-729-900-85	TRANSISTOR	DTC144WS	
Q106	8-729-905-50	TRANSISTOR	DTC343TS	
Q201	8-729-905-50	TRANSISTOR	DTC343TS	
Q203	8-729-905-50	TRANSISTOR	DTC343TS	
Q204	8-729-904-39	TRANSISTOR	DTC114TS	
Q205	8-729-900-85	TRANSISTOR	DTC144WS	
Q206	8-729-905-50	TRANSISTOR	DTC343TS	
Q301	8-729-904-39	TRANSISTOR	DTC114TS	
Q302	8-729-900-85	TRANSISTOR	DTC144WS	
Q303	8-729-905-50	TRANSISTOR	DTC343TS	
Q304	8-729-205-83	TRANSISTOR	2SC2458L-GR	
Q305	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q306	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q307	8-729-900-85	TRANSISTOR	DTC144WS	
Q308	8-729-801-84	TRANSISTOR	2SB1013-4	
Q309	8-729-904-39	TRANSISTOR	DTC114TS	
Q310	8-729-905-50	TRANSISTOR	DTC343TS	
Q311	8-729-800-34	TRANSISTOR	2SC3070	
Q601	8-729-115-30	TRANSISTOR	2SK105A-30	
Q602	8-729-806-30	TRANSISTOR	2SC4048	
Q603	8-729-100-13	TRANSISTOR	2SC2001-K2	
Q604	8-729-378-84	TRANSISTOR	2SD788-5	
Q605	8-729-115-30	TRANSISTOR	2SK105A-30	
Q606	8-729-115-30	TRANSISTOR	2SK105A-30	
Q607	8-729-904-39	TRANSISTOR	DTC114TS	
Q608	8-729-202-56	TRANSISTOR	2SA950-Y	
Q609	8-729-202-56	TRANSISTOR	2SA950-Y	
Q610	8-729-100-13	TRANSISTOR	2SC2001-K2	
Q611	8-729-100-13	TRANSISTOR	2SC2001-K2	
Q612	8-729-801-84	TRANSISTOR	2SB1013-4	
Q613	8-729-806-30	TRANSISTOR	2SC4048	
Q614	8-729-902-80	TRANSISTOR	DTA114YS	
Q615	8-729-902-80	TRANSISTOR	DTA114YS	
Q616	8-729-904-39	TRANSISTOR	DTC114TS	
Q617	8-729-904-39	TRANSISTOR	DTC114TS	
Q618	8-729-902-80	TRANSISTOR	DTA114YS	
Q619	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q620	8-729-904-39	TRANSISTOR	DTC114TS	
Q621	8-729-900-85	TRANSISTOR	DTC144WS	
Q622	8-729-904-39	TRANSISTOR	DTC114TS	
Q623	8-729-806-30	TRANSISTOR	2SC4048	
Q624	8-729-904-39	TRANSISTOR	DTC114TS	
Q625	8-729-806-30	TRANSISTOR	2SC4048	
Q626	8-729-115-30	TRANSISTOR	2SK105A-30	
Q627	8-729-806-30	TRANSISTOR	2SC4048	
Q628	8-729-100-13	TRANSISTOR	2SC2001-K2	
Q629	8-729-378-84	TRANSISTOR	2SD788-5	
Q630	8-729-806-30	TRANSISTOR	2SC4048	
Q631	8-729-806-30	TRANSISTOR	2SC4048	
Q632	8-729-900-85	TRANSISTOR	DTC144WS	
Q633	8-729-902-80	TRANSISTOR	DTA114YS	
Q638	8-729-801-84	TRANSISTOR	2SB1013-4	
Q639	8-729-806-30	TRANSISTOR	2SC4048	
Q640	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q641	8-729-806-30	TRANSISTOR	2SC4048	
Q642	8-729-904-39	TRANSISTOR	DTC114TS	
Q643	8-729-904-39	TRANSISTOR	DTC114TS	
Q644	8-729-904-34	TRANSISTOR	DTA114TS	
Q645	8-729-904-34	TRANSISTOR	DTA114TS	
Q646	8-729-806-30	TRANSISTOR	2SC4048	
Q647	8-729-904-39	TRANSISTOR	DTC114TS	
Q648	8-729-904-39	TRANSISTOR	DTC114TS	
Q649	8-729-904-39	TRANSISTOR	DTC114TS	

TC

Ref. No.	Part No.	Description				Remark
Q650	8-729-900-85	TRANSISTOR	DTC144WS			
Q656	8-729-806-30	TRANSISTOR	2SC4048			
Q657	8-729-202-56	TRANSISTOR	2SA950-Y			
Q658	8-729-202-56	TRANSISTOR	2SA950-Y			
Q659	8-729-902-80	TRANSISTOR	DTA114YS			
Q660	8-729-902-80	TRANSISTOR	DTA114YS			
Q661	8-729-900-85	TRANSISTOR	DTC144WS			
Q662	8-729-900-85	TRANSISTOR	DTC144WS			
Q665	8-729-900-85	TRANSISTOR	DTC144WS			
Q666	8-729-904-39	TRANSISTOR	DTC114TS			
Q667	8-729-806-30	TRANSISTOR	2SC4048			
Q668	8-729-806-30	TRANSISTOR	2SC4048			
Q670	8-729-806-30	TRANSISTOR	2SC4048			
Q671	8-729-806-30	TRANSISTOR	2SC4048			
		< RESISTOR >				
R101	1-247-891-00	CARBON	330K	5%	1/4W	
R102	1-249-417-11	CARBON	1K	5%	1/4W	
R103	1-247-891-00	CARBON	330K	5%	1/4W	
R104	1-249-417-11	CARBON	1K	5%	1/4W	
R105	1-249-406-11	CARBON	120	5%	1/4W	
R106	1-249-430-11	CARBON	12K	5%	1/4W	
R107	1-249-432-11	CARBON	18K	5%	1/4W	
R108	1-249-420-11	CARBON	1.8K	5%	1/4W	
R109	1-249-416-11	CARBON	820	5%	1/4W	
R110	1-249-429-11	CARBON	10K	5%	1/4W	
R111	1-249-434-11	CARBON	27K	5%	1/4W	
R112	1-249-429-11	CARBON	10K	5%	1/4W	
R113	1-249-431-11	CARBON	15K	5%	1/4W	
R114	1-249-431-11	CARBON	15K	5%	1/4W	
R115	1-247-836-11	CARBON	1.6K	5%	1/4W	
R116	1-249-430-11	CARBON	12K	5%	1/4W	
R117	1-249-426-11	CARBON	5.6K	5%	1/4W	
R118	1-249-405-11	CARBON	100	5%	1/4W	
R119	1-249-429-11	CARBON	10K	5%	1/4W	
R120	1-249-439-11	CARBON	68K	5%	1/4W	
R121	1-247-866-11	CARBON	30K	5%	1/4W	
R201	1-247-891-00	CARBON	330K	5%	1/4W	
R202	1-249-417-11	CARBON	1K	5%	1/4W	
R203	1-247-891-00	CARBON	330K	5%	1/4W	
R204	1-249-417-11	CARBON	1K	5%	1/4W	
R205	1-249-406-11	CARBON	120	5%	1/4W	
R206	1-249-430-11	CARBON	12K	5%	1/4W	
R207	1-249-432-11	CARBON	18K	5%	1/4W	
R208	1-249-420-11	CARBON	1.8K	5%	1/4W	
R209	1-249-416-11	CARBON	820	5%	1/4W	
R210	1-249-429-11	CARBON	10K	5%	1/4W	
R211	1-249-434-11	CARBON	27K	5%	1/4W	
R212	1-249-429-11	CARBON	10K	5%	1/4W	
R213	1-249-431-11	CARBON	15K	5%	1/4W	
R214	1-249-431-11	CARBON	15K	5%	1/4W	
R215	1-247-836-11	CARBON	1.6K	5%	1/4W	
R216	1-249-430-11	CARBON	12K	5%	1/4W	
R217	1-249-426-11	CARBON	5.6K	5%	1/4W	
R218	1-249-405-11	CARBON	100	5%	1/4W	
R219	1-249-429-11	CARBON	10K	5%	1/4W	
R220	1-249-439-11	CARBON	68K	5%	1/4W	
R221	1-247-866-11	CARBON	30K	5%	1/4W	
R301	1-249-429-11	CARBON	10K	5%	1/4W	
R302	1-249-405-11	CARBON	100	5%	1/4W	
R303	1-249-441-11	CARBON	100K	5%	1/4W	
R304	1-249-438-11	CARBON	56K	5%	1/4W	
R305	1-249-431-11	CARBON	15K	5%	1/4W	
R306	1-249-433-11	CARBON	22K	5%	1/4W	
R307	1-247-899-11	CARBON	680K	5%	1/4W	
R308	1-249-405-11	CARBON	100	5%	1/4W	
R309	1-249-423-11	CARBON	3.3K	5%	1/4W	
R310	1-249-405-11	CARBON	100	5%	1/4W	
R311	1-247-870-11	CARBON	43K	5%	1/4W	
R312	1-249-437-11	CARBON	47K	5%	1/4W	
R313	1-249-433-11	CARBON	22K	5%	1/4W	
R314	1-249-429-11	CARBON	10K	5%	1/4W	
R315	1-249-408-11	CARBON	180	5%	1/4W	
R316	1-249-405-11	CARBON	100	5%	1/4W	
R317	1-247-864-11	CARBON	24K	5%	1/4W	
R318	1-249-408-11	CARBON	180	5%	1/4W	
R319	1-249-429-11	CARBON	10K	5%	1/4W	
R320	1-249-435-11	CARBON	33K	5%	1/4W	
R321	1-249-429-11	CARBON	10K	5%	1/4W	
R322	1-249-439-11	CARBON	68K	5%	1/4W	
R323	1-249-439-11	CARBON	68K	5%	1/4W	
R324	1-249-421-11	CARBON	2.2K	5%	1/4W	
R325	1-249-421-11	CARBON	2.2K	5%	1/4W	
R326	1-249-437-11	CARBON	47K	5%	1/4W	
R327	1-249-429-11	CARBON	10K	5%	1/4W	
R328	1-249-429-11	CARBON	10K	5%	1/4W	
R329	1-249-417-11	CARBON	1K	5%	1/4W	
R330	1-249-405-11	CARBON	100	5%	1/4W	
R331	⚠ 1-212-950-00	FUSIBLE	4.7	5%	1/2W	F
R332	1-249-429-11	CARBON	10K	5%	1/4W	
R333	1-249-437-11	CARBON	47K	5%	1/4W	
R334	1-249-421-11	CARBON	2.2K	5%	1/4W	
R335	1-249-389-11	CARBON	4.7	5%	1/4W	
R336	1-249-395-11	CARBON	15	5%	1/4W	
R337	1-249-427-11	CARBON	6.8K	5%	1/4W	
R338	1-249-401-11	CARBON	47	5%	1/4W	
R339	1-249-425-11	CARBON	4.7K	5%	1/4W	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description				Remark
R340	1-249-433-11	CARBON	22K	5%	1/4W	
R341	1-249-417-11	CARBON	1K	5%	1/4W	
R601	1-249-425-11	CARBON	4.7K	5%	1/4W	
R602	1-249-441-11	CARBON	100K	5%	1/4W	
R603	1-249-417-11	CARBON	1K	5%	1/4W	
R604	1-249-412-11	CARBON	390	5%	1/4W	
R605	1-249-441-11	CARBON	100K	5%	1/4W	
R606	1-249-441-11	CARBON	100K	5%	1/4W	
R607	1-249-417-11	CARBON	1K	5%	1/4W	
R608	1-249-417-11	CARBON	1K	5%	1/4W	
R609	1-249-417-11	CARBON	1K	5%	1/4W	
R610	1-249-417-11	CARBON	1K	5%	1/4W	
R611	1-249-438-11	CARBON	56K	5%	1/4W	
R612	1-249-417-11	CARBON	1K	5%	1/4W	
R613	1-249-438-11	CARBON	56K	5%	1/4W	
R614	1-249-412-11	CARBON	390	5%	1/4W	
R615	1-249-429-11	CARBON	10K	5%	1/4W	
R616	1-249-429-11	CARBON	10K	5%	1/4W	
R617	1-249-441-11	CARBON	100K	5%	1/4W	
R618	1-249-441-11	CARBON	100K	5%	1/4W	
R619	1-249-429-11	CARBON	10K	5%	1/4W	
R620	1-249-441-11	CARBON	100K	5%	1/4W	
R621	1-249-441-11	CARBON	100K	5%	1/4W	
R622	1-249-429-11	CARBON	10K	5%	1/4W	
R623	1-249-429-11	CARBON	10K	5%	1/4W	
R624	1-249-417-11	CARBON	1K	5%	1/4W	
R625	1-249-441-11	CARBON	100K	5%	1/4W	
R626	1-249-412-11	CARBON	390	5%	1/4W	
R627	1-249-425-11	CARBON	4.7K	5%	1/4W	
R628	1-249-425-11	CARBON	4.7K	5%	1/4W	
R629	1-249-441-11	CARBON	100K	5%	1/4W	
R630	1-249-417-11	CARBON	1K	5%	1/4W	
R634	1-249-429-11	CARBON	10K	5%	1/4W	
R637	1-249-417-11	CARBON	1K	5%	1/4W	
R638	1-249-411-11	CARBON	330	5%	1/4W	
R639	1-247-883-00	CARBON	150K	5%	1/4W	
R640	1-249-412-11	CARBON	390	5%	1/4W	
R641	1-249-425-11	CARBON	4.7K	5%	1/4W	
R642	1-249-429-11	CARBON	10K	5%	1/4W	
R643	1-249-417-11	CARBON	1K	5%	1/4W	
R644	1-249-416-11	CARBON	820	5%	1/4W	
R645	1-249-412-11	CARBON	390	5%	1/4W	
R646	1-249-437-11	CARBON	47K	5%	1/4W	
R647	1-247-893-11	CARBON	390K	5%	1/4W	
R648	1-249-429-11	CARBON	10K	5%	1/4W	
R649	1-249-441-11	CARBON	100K	5%	1/4W	
R650	1-249-439-11	CARBON	68K	5%	1/4W	
R651	1-249-429-11	CARBON	10K	5%	1/4W	
R652	1-249-429-11	CARBON	10K	5%	1/4W	
R653	1-249-417-11	CARBON	1K	5%	1/4W	
R656	1-249-421-11	CARBON	2.2K	5%	1/4W	
R657	1-249-441-11	CARBON	100K	5%	1/4W	
R658	1-249-417-11	CARBON	1K	5%	1/4W	
R659	1-249-429-11	CARBON	10K	5%	1/4W	
R660	1-249-425-11	CARBON	4.7K	5%	1/4W	
R673	1-249-425-11	CARBON	4.7K	5%	1/4W	
R674	1-249-429-11	CARBON	10K	5%	1/4W	
R675	1-249-417-11	CARBON	1K	5%	1/4W	
R676	1-249-441-11	CARBON	100K	5%	1/4W	
R677	1-215-453-00	METAL	22K	1%	1/6W	
R678	1-249-417-11	CARBON	1K	5%	1/4W	
R682	1-249-437-11	CARBON	47K	5%	1/4W	
R683	1-249-425-11	CARBON	4.7K	5%	1/4W	
R684	1-249-425-11	CARBON	4.7K	5%	1/4W	
R692	1-249-429-11	CARBON	10K	5%	1/4W	
R6004	1-249-429-11	CARBON	10K	5%	1/4W	
R6005	1-249-429-11	CARBON	10K	5%	1/4W	

< VARIABLE RESISTOR >

RV101	1-241-040-21	RES, ADJ, CARBON 22K
RV102	1-241-040-21	RES, ADJ, CARBON 22K
RV103	1-241-042-21	RES, ADJ, CARBON 100K
RV104	1-241-038-21	RES, ADJ, CARBON 5K
RV201	1-241-040-21	RES, ADJ, CARBON 22K
RV202	1-241-040-21	RES, ADJ, CARBON 22K
RV203	1-241-042-21	RES, ADJ, CARBON 100K
RV204	1-241-038-21	RES, ADJ, CARBON 5K
RV601	1-241-038-21	RES, ADJ, CARBON 5K
RV602	1-241-037-21	RES, ADJ, CARBON 2.2K
RV603	1-241-038-21	RES, ADJ, CARBON 5K
RV604	1-241-037-21	RES, ADJ, CARBON 2.2K
RV605	1-228-994-00	RES, ADJ, METAL10K

< TRANSFORMER >

T301	1-433-325-11	TRANSFORMER, BIAS OSCILLATION

< CONNECTOR >

W601	* 1-569-935-11	SOCKET, CONNECTOR 19P

****

* A-3289-770-A TC SUB BOARD, COMPLETE

****

< CAPACITOR >

C687	1-162-851-11	CERAMIC	0.1uF	10%	16V
C688	1-162-851-11	CERAMIC	0.1uF	10%	16V

TC SUB VOLUME

Ref. No.	Part No.	Description				Remark
C697	1-124-903-11	ELECT	1uF	20%	50V	
C698	1-124-903-11	ELECT	1uF	20%	50V	
C699	1-124-902-00	ELECT	0.47uF	20%	50V	
		< CONNECTOR >				
CN612	* 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P				
CN613	* 1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P				
CN619	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P				
		< DIODE >				
D613	8-719-911-19	DIODE 1SS119				
D616	8-719-911-19	DIODE 1SS119				
D628	8-719-911-19	DIODE 1SS119				
D629	8-719-911-19	DIODE 1SS119				
D630	8-719-911-19	DIODE 1SS119				
D631	8-719-911-19	DIODE 1SS119				
D648	8-719-911-19	DIODE 1SS119				
		< IC >				
IC604	8-759-505-48	IC S-80740AN				
		< TRANSISTOR >				
Q634	8-729-202-56	TRANSISTOR 2SA950-Y				
Q635	8-729-202-56	TRANSISTOR 2SA950-Y				
Q636	8-729-100-13	TRANSISTOR 2SC2001-K2				
Q637	8-729-100-13	TRANSISTOR 2SC2001-K2				
Q651	8-729-806-30	TRANSISTOR 2SC4048				
Q652	8-729-806-30	TRANSISTOR 2SC4048				
Q653	8-729-902-80	TRANSISTOR DTA114YS				
Q654	8-729-806-30	TRANSISTOR 2SC4048				
Q655	8-729-904-34	TRANSISTOR DTA114TS				
Q663	8-729-904-39	TRANSISTOR DTC114TS				
Q664	8-729-806-30	TRANSISTOR 2SC4048				
Q696	8-729-904-39	TRANSISTOR DTC114TS				
Q697	8-729-904-39	TRANSISTOR DTC114TS				
Q698	8-729-904-39	TRANSISTOR DTC114TS				
Q699	8-729-806-30	TRANSISTOR 2SC4048				
		< RESISTOR >				
R632	1-249-441-11	CARBON	100K	5%	1/4W	
R635	1-249-417-11	CARBON	1K	5%	1/4W	
R636	1-249-417-11	CARBON	1K	5%	1/4W	
R654	1-249-425-11	CARBON	4.7K	5%	1/4W	
R655	1-249-425-11	CARBON	4.7K	5%	1/4W	
R679	1-249-441-11	CARBON	100K	5%	1/4W	
R680	1-249-417-11	CARBON	1K	5%	1/4W	
R681	1-249-417-11	CARBON	1K	5%	1/4W	
R688	1-249-417-11	CARBON	1K	5%	1/4W	
R693	1-249-429-11	CARBON	10K	5%	1/4W	
R694	1-249-437-11	CARBON	47K	5%	1/4W	
R695	1-249-429-11	CARBON	10K	5%	1/4W	
R696	1-249-438-11	CARBON	56K	5%	1/4W	
R697	1-249-435-11	CARBON	33K	5%	1/4W	
R698	1-249-441-11	CARBON	100K	5%	1/4W	
R699	1-249-405-11	CARBON	100	5%	1/4W	
R6001	1-249-425-11	CARBON	4.7K	5%	1/4W	

****

* A-3289-773-A VOLUME BOARD, COMPLETE

****

< CAPACITOR >

C101	1-124-902-00	ELECT	0.47uF	20%	50V
C102	1-161-494-00	CERAMIC	0.022uF		25V
C103	1-162-288-31	CERAMIC	330PF	10%	50V
C104	1-162-851-11	CERAMIC	0.1uF		16V
C105	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C106	1-124-903-11	ELECT	1uF	20%	50V
C107	1-161-061-11	CERAMIC	0.068uF	10%	50V
C108	1-124-902-00	ELECT	0.47uF	20%	50V
C109	1-162-282-31	CERAMIC	100PF	10%	50V
C110	1-162-282-31	CERAMIC	100PF	10%	50V
C111	1-162-282-31	CERAMIC	100PF	10%	50V
C112	1-124-902-00	ELECT	0.47uF	20%	50V
C113	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C114	1-161-060-00	CERAMIC	0.056uF	10%	25V
C115	1-124-902-00	ELECT	0.47uF	20%	50V
C201	1-124-902-00	ELECT	0.47uF	20%	50V
C202	1-161-494-00	CERAMIC	0.022uF		25V
C203	1-162-288-31	CERAMIC	330PF	10%	50V
C204	1-162-851-11	CERAMIC	0.1uF		16V
C205	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C206	1-124-903-11	ELECT	1uF	20%	50V
C207	1-161-061-11	CERAMIC	0.068uF	10%	50V
C208	1-124-902-00	ELECT	0.47uF	20%	50V
C209	1-162-282-31	CERAMIC	100PF	10%	50V
C210	1-162-282-31	CERAMIC	100PF	10%	50V
C211	1-162-282-31	CERAMIC	100PF	10%	50V
C212	1-124-902-00	ELECT	0.47uF	20%	50V
C213	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C214	1-161-060-00	CERAMIC	0.056uF	10%	25V
C215	1-124-902-00	ELECT	0.47uF	20%	50V
C401	1-124-471-00	ELECT	1000uF	20%	6.3V
C402	1-162-851-11	CERAMIC	0.1uF		16V
C403	1-162-851-11	CERAMIC	0.1uF		16V
C404	1-124-126-00	ELECT	47uF	20%	10V
C405	1-124-902-00	ELECT	0.47uF	20%	50
C449	1-136-170-00	FILM	0.27uF	5%	50V

VOLUME

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
CN401	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
CN402	* 1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
CN403	* 1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CN404	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P	
CN406	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
		< IC >	
IC401	8-759-962-08	IC BA6208	
IC402	8-759-972-97	IC BA3823LS	
		< JACK >	
J401	1-566-891-11	JACK (PHONES)	
		< COIL >	
L401	1-408-426-00	INDUCTOR 270uH	
L402	1-408-111-00	INDUCTOR 3.3uH	
L403	1-408-111-00	INDUCTOR 3.3uH	
L405	1-424-090-11	COIL, LINE FILTER	
		< TRANSISTOR >	
Q101	8-729-905-50	TRANSISTOR DTC343TS	
Q201	8-729-905-50	TRANSISTOR DTC343TS	
		< RESISTOR >	
R101	1-249-417-11	CARBON 1K 5% 1/4W	
R102	1-249-423-11	CARBON 3.3K 5% 1/4W	
R103	1-249-426-11	CARBON 5.6K 5% 1/4W	
R111	1-249-417-11	CARBON 1K 5% 1/4W	
R112	1-249-441-11	CARBON 100K 5% 1/4W	
R201	1-249-417-11	CARBON 1K 5% 1/4W	
R202	1-249-423-11	CARBON 3.3K 5% 1/4W	
R203	1-249-426-11	CARBON 5.6K 5% 1/4W	
R211	1-249-417-11	CARBON 1K 5% 1/4W	
R212	1-249-441-11	CARBON 100K 5% 1/4W	
R401	1-249-429-11	CARBON 10K 5% 1/4W	
R402	1-249-429-11	CARBON 10K 5% 1/4W	
R403	1-249-405-11	CARBON 100 5% 1/4W	
R404	1-249-437-11	CARBON 47K 5% 1/4W	
R431	1-249-393-11	CARBON 10 5% 1/4W	
		< VARIABLE RESISTOR >	
RV401	1-241-033-21	RES, VAR, CARBON 50K/50K (EQ 10kHz)	
RV402	1-241-033-21	RES, VAR, CARBON 50K/50K (EQ 1kHz)	
RV403	1-241-033-21	RES, VAR, CARBON 50K/50K (EQ 100Hz)	
RV404	1-238-177-11	RES, VAR, CARBON 50K/50K (VOLUME)	

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S401	1-570-913-11	SWITCH, PUSH (1 KEY)	
		**********	
		MISCELLANEOUS	
		**********	
151	* 1-937-672-01	HEAT SINK (E)	
152	* 1-937-671-01	HEAT SINK (D)	
153	* 1-937-673-01	HEAT SINK (F)	
202	1-556-650-00	CORD, CONNECTION (SPEAKER)	
405	⚠ 8-848-137-11	OPTICL PICKUP KSS-210B	
ANT1	1-501-480-11	ANTENNA, TELESCOPIC	
C491	1-119-511-11	CAP, ELECT (NONPOLAR) 15MF	
C492	1-119-511-11	CAP, ELECT (NONPOLAR) 15MF	
HE901	A-3113-036-A	HEAD ASSY, ROTARY (DECK A)	
HP901	A-3113-036-A	HEAD ASSY, ROTARY (DECK A)	
HRP901	A-3113-034-A	HEAD ASSY, ROTARY (DECK B)	
M901A	A-3133-405-A	MOTOR ASSY, CAPSTAN (DECK A)	
M901B	A-3133-405-A	MOTOR ASSY, CAPSTAN (DECK B)	
M902A	A-3133-406-A	MOTOR ASSY, REEL (DECK A)	
M902B	A-3208-406-A	MOTOR ASSY, REEL (DECK B)	
PM901A	1-454-533-11	SOLENOID, PLUNGER (DECK A)	
PM901B	1-454-533-11	SOLENOID, PLUNGER (DECK B)	
S801	1-571-283-11	SWITCH, LEAF (OPEN/CLOSE)	
SP901	1-503-488-11	SPEAKER	
SP902	1-544-342-11	SPEAKER	
		**********	
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-465-502-11	COMMANDER, REMOTE (STNDARD TYPE)	
	⚠ 1-557-287-11	CORD, POWER	
	3-753-482-21	MANUAL, INSTRUCTION (ENGLISH)	
	3-371-966-01	INDIVIDUAL CARTON	
	* 4-937-665-01	CUSHION (UPPER)	
	* 4-937-666-01	CUSHION (LOWER)	
		**********	

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		HARDWARE LIST	
		*************	
#1	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	
#2	7-685-647-79	SCREW, TAPPING +BV 3X10	
#3	7-621-255-10	SCREW +BVTT 2X3 (S)	
#4	7-621-772-00	SCREW +B 2X3	
#5	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
#6	7-685-648-79	SCREW, TAPPING	
#7	7-685-646-79	SCREW, TAPPING +BV 3X8	
#8	7-682-549-04	SCREW +B 3X10	
#9	7-621-255-15	SCREW +P 2X3	
#10	7-621-770-67	SCREW +P 2.6X6	
#11	7-621-772-20	SCREW +B 2X5	
#12	7-627-553-47	PRECISION SCREW +P 2X4 TYPE 3	

9-956-636-11

Sony Corporation
General Audio Group

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91G0531-1
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CFD-775

SONY
SERVICE MANUAL

US Model

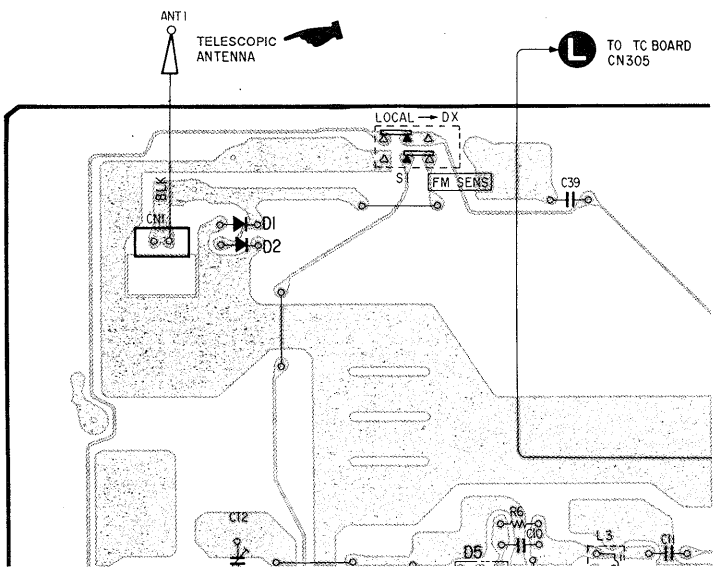
SUPPLEMENT-1

File this Supplement with the Service Manual.

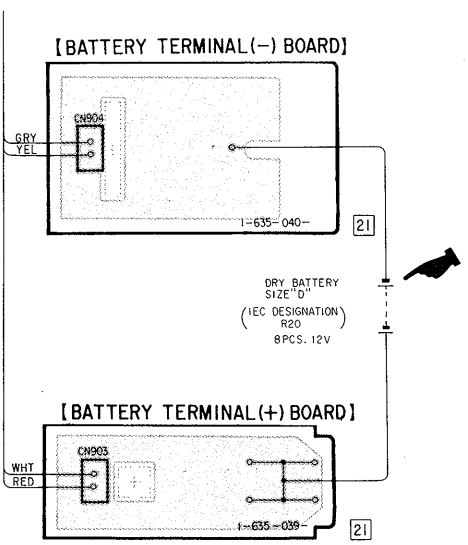
☛ : Corrected portion

- **SECTION 5 DIAGRAMS**

- **Service Manual Page 31.**
  (Location A – C, 1 – 4)



- **Service Manual Page 56.**
  (Location H – K, 14 – 16)



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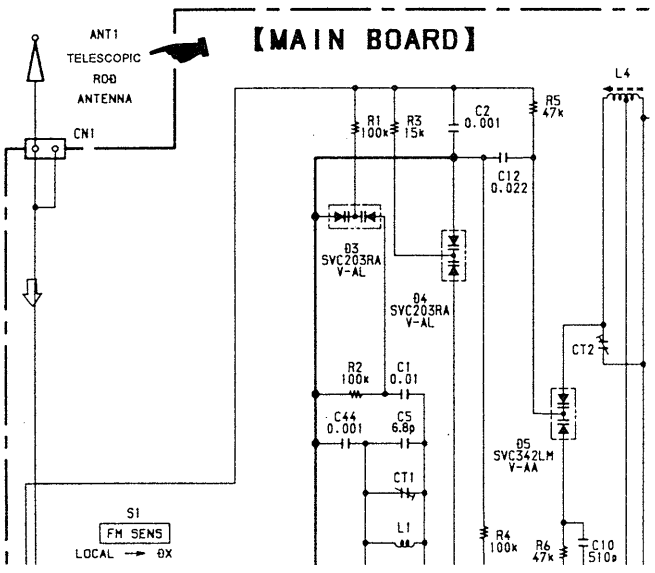
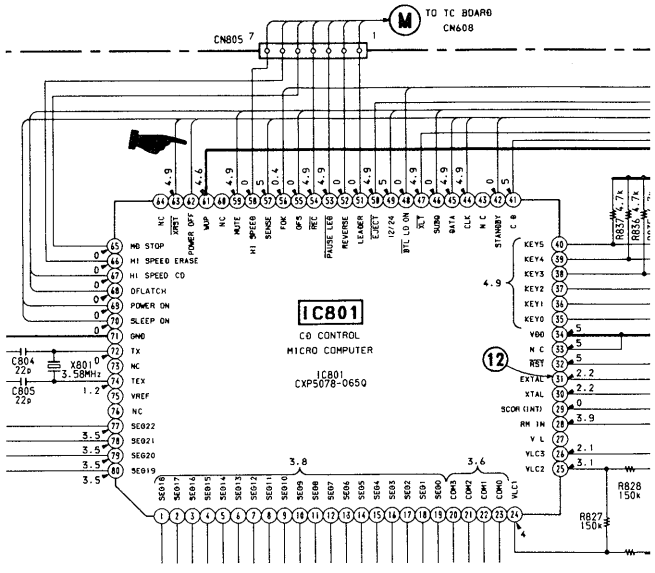
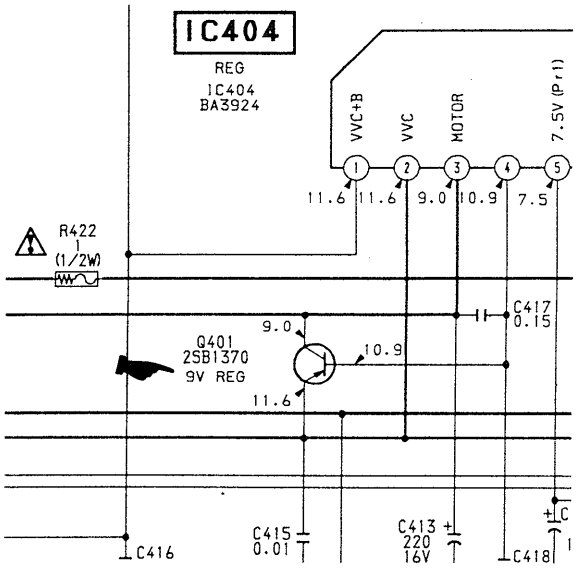
● **Service Manual Page 33.**
(Location C – E, 1 – 5)



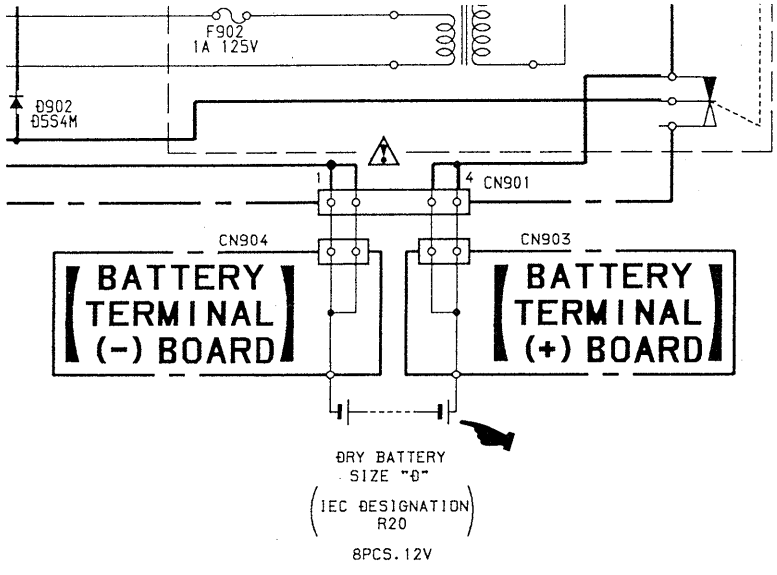
● **Service Manual Page 48.**
(Location A – E, 8 – 13)



● **Service Manual Page 53.**
(Location G – I, 9 – 11)



● **Service Manual Page 54.**
(Location J – L, 16 – 19)



● **SECTION 6 EXPLODED VIEWS (Service Manual Page 62.)**

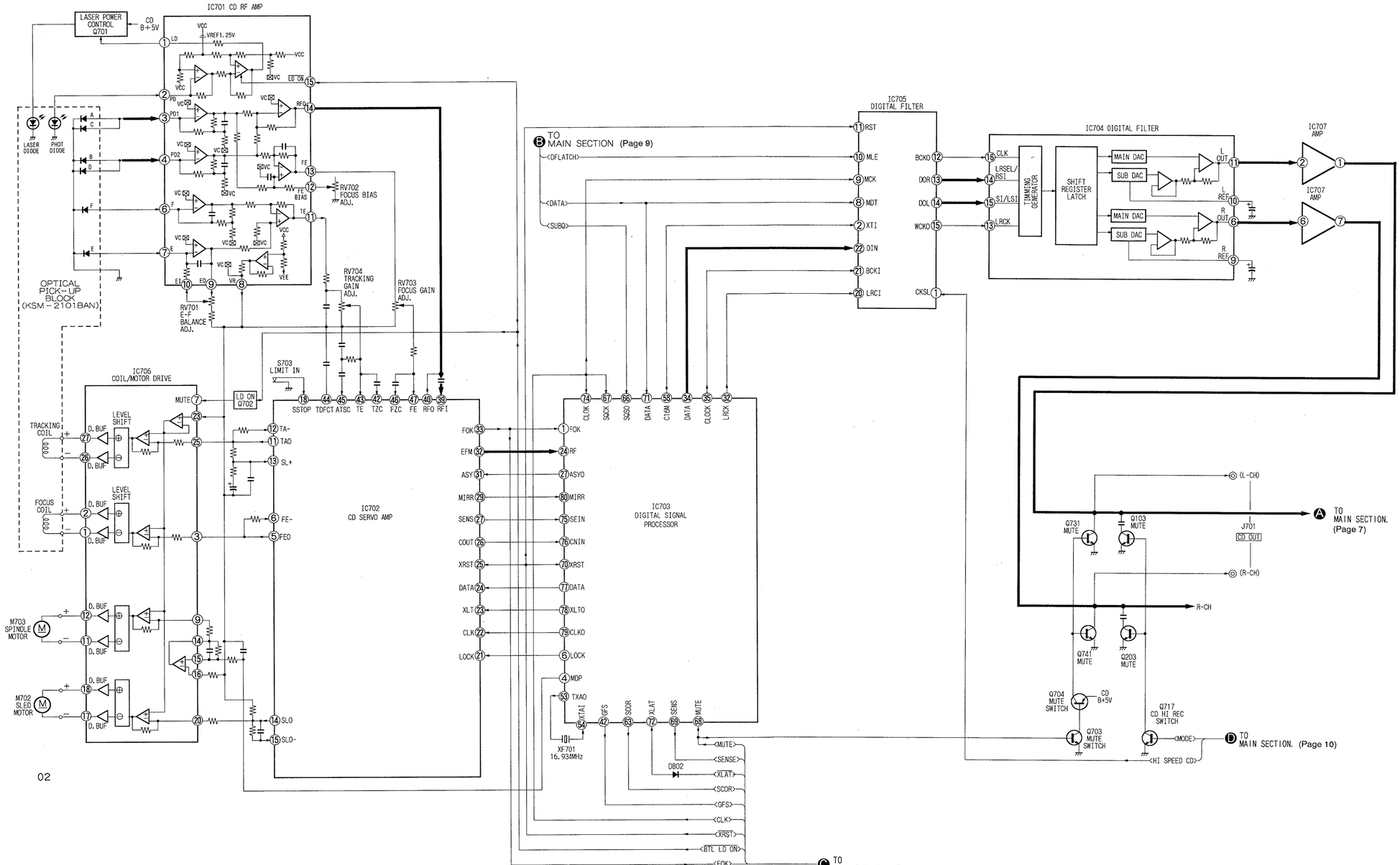
(Incorrect)

Ref. No.	Part No.	Description
276	3-381-441-XX	SPACER····(DECK B)

(Correct)

Ref. No.	Part No.	Description
276	3-831-441-99	SPACER····(DECK B)

1. BLOCK DIAGRAMS (CD SECTION)



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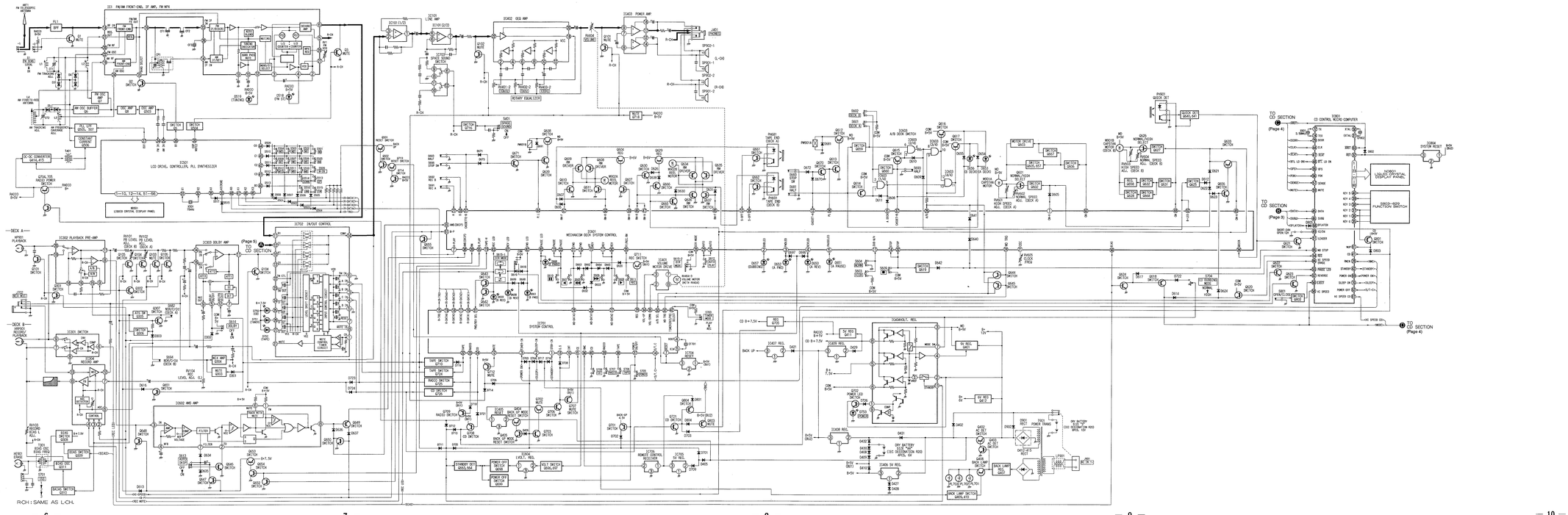
2. BLOCK DIAGRAMS (MAIN SECTION)



02

RCH : SAME AS L-CH.

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CORRECTION-1

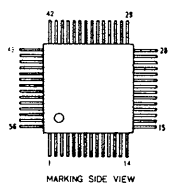
File this correction with the service manual.

: Corrected Portion.

SECTION 5 DIAGRAMS

- **SEMICONDUCTOR LEAD LAYOUT**
  (Service Manual Page 27.)

μPD1724GB-524-1A7



SECTION 7 ELECTRICAL PARTS LIST
(Service Manual Page 67.)

Ref. No.	Part No.	Description		Remark
		〈 IC 〉		
IC501	8-759-151-26	IC	uPD1724GB-524-1A7	
IC706	8-749-920-83	IC	GP1U52XB	
IC801	8-752-819-99	IC	CXP5078-065Q	
IC804	8-759-970-47	IC	PST529J	

9-956-636-91

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CORRECTION-2

File this correction with the service manual.

• SECTION 6 EXPLODED VIEWS (Service Manual Page 57,60.)

(Incorrect)				(Correct)		
Ref. No.	Part No.	Description		Ref. No.	Part No.	Description
5	3-381-441-XX	SPACER, 3×10	→	5	3-831-441-11	SPACER, 3×10
151	* 1-937-672-01	HEAT SINK (E)		151	*4-937-672-01	HEAT SINK (E)
152	* 1-937-671-01	HEAT SINK (D)	→	152	*4-937-671-01	HEAT SINK (D)
153	* 1-937-673-01	HEAT SINK (F)		153	*4-937-673-01	HEAT SINK (F)

9-956-636-92

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CORRECTION-3

File this Correction with the Service Manual.

● **SECTION 6 EXPLODED VIEWS (Service Manual Page 57, 60.)**

(Incorrect)

Ref. No.	Part No.	Description
5	3-381-441-XX	SPACER, 3×10

➡

(Correct)

Ref. No.	Part No.	Description
5	3-831-441-XX	SPACER, 3×10

9-956-636-93

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